THE WORLD OF FREE SOFTWARE – YOUR MONTHLY GUIDE

AMIGA • PC • ST

PUBLIC DOMAIN

AMIGA • PC • ST

ISSUE 8 • £1.95
JULY 1992

THE LATEST PD, SHAREWARE & LICENCEWARE REVIEWED

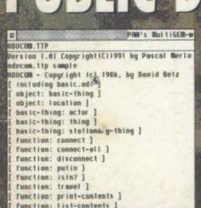
HOW LEGAL IS YOUR PD DISK COLLECTION?

Find out how the copyright laws affect you ...PAGE 25

CHANGE YOUR IMAGE!

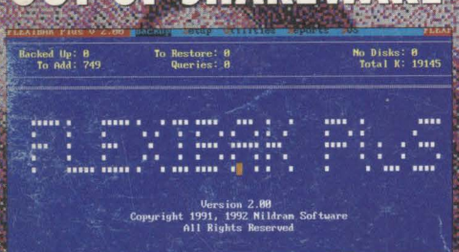
Flip her, smudge her, reverse her, dither her! Image manipulation made easy ...PAGE 33

PROGRAMMING IN PUBLIC DOMAIN



Write PD programs with PD languages ...PAGE 92

MAKING MONEY OUT OF SHAREWARE



It can be done! Nildram Software tells all ...PAGE 49

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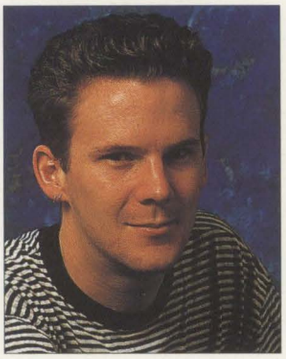
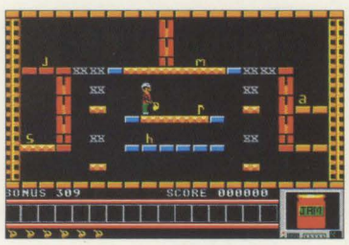


Welcome to issue eight of *Public Domain*. We're pleased with the results we've been getting in the reader surveys that you have been sending in. So far we've received just a relative handful of questionnaires because this is being written less than a week after issue seven hit the newsagents' shelves. If you haven't filled it in yet then dig it out and send it off – your views really will count.

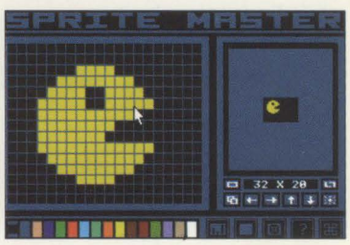
There's a fair few tasty articles for you to bite into in this month's editon. All those brilliant demos in your disk box – are you aware that those great digitised pictures and excellent sampled sounds may be an infringement of copyright? Turn to page 25 to find out what this means to the PD industry!

Interested in tinkering around with pretty pictures? Our graphics manipulation feature will help you have the best set of pixels in town. Take a gander at page 33.

And how about creating your own programs to release into the public domain? Page 92 starts you off.



A platform game with a difference – it's educational! But is it any good? See page 89



You can create sprites with *Sprite Master*, but what else can it do? Find out on page 12

THE PD TEAM – ISSUE 8

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The latest rave dance tracks, Bart Simpson, *Terminator*, *Garfield* – they're always cropping up on demo disks. But do the programmers have the right to use them? Are these disks infringing copyright laws? We check out this murky legal minefield

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Not all magazines come on paper. The best of the latest crop of diskzines reviewed and rated

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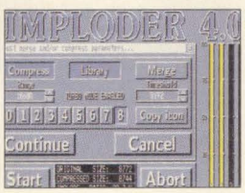

Ordering PD Made Easy 80
Use our special form to send off for your PD disks

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Whatever your machine we have a great offer for you

Reviews: Home & Education 82
You can't beat the public domain when it comes to the variety of specialist interest and education software on offer. We dish out the grades on the latest batch

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Subscribe now! 97
Get *Public Domain* delivered to your door every month

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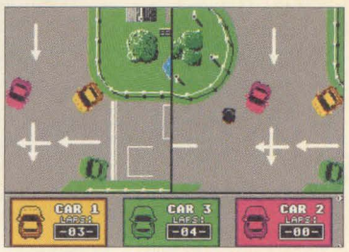
Every program reviewed in this issue listed so that you can locate them in an instant

Reading documentation files doesn't have to be a chore. Check out page 64 for proof



Hot gaming action in the form of *Hotwheels* for the ST, reviewed on page 42

NEW READERS START HERE

The public domain is a weird and wacky place where you can get all sorts of software at prices you wouldn't believe – some of it even free! Cheap doesn't mean nasty, though. A lot of it is every bit as good, if not better, than full-priced programs. But, we have to admit, there are some duds too. We aim to point you in the direction of the decent stuff and review all the software as if it were a commercial product; we're not going to be soft just because it's cheap.

If you're new to PD and don't know what all the different varieties are and how to get hold of the disks, this is the place to start...

So, what does it all mean?

● **Public domain:** A generic term which at its simplest and purest level refers to non-copyrighted software which can be distributed freely. You can copy a public domain disk with no fear of breaking copyright laws. If you order disks from a library, then in theory you should only be charged for the distribution and copying costs. Freeware is virtually the same as PD except that the author retains the copyright to his program and you are not allowed to alter the program in any way.

● **Shareware:** Operates on a try-before-you-buy basis. Distributed in the same way as PD software (your mates can copy it), the difference being that if you like the program and intend to use it regularly you are required to send off a registration fee. This is usually fairly minimal, and represents good value as some shareware programs rival commercial counterparts, and there are often very good inducements to register.

● **Licenceware:** Certain libraries are licensed to sell the software – it's not allowed to be sold for profit without official permission – and for every copy of the program sold the author receives a royalty. Some licenceware cannot be copied freely among friends – check with the doc files on the disk for this information.

The briefing session – essential info

Type: We review three sorts of software: PD, Shareware and licenceware. Check out What Does It All Mean? above for a full explanation of the differences between them

Author: Here we credit the people who programmed the software

Requirements: The minimum requirements you'll need to get the program running, including memory, disk drives and graphics cards

Disk number: The catalogue number of the disk if you want to obtain it from the credited library. Other libraries that supply the disk will probably give it a different number

Registration fee: Only applicable to shareware. If you decide you want to carry on using the software you are required to send away a registration fee. Details of how to register, and any benefits you might receive if you do so, will be on the disk itself. DON'T send the registration fee to the library because a) the registration address will probably be completely different and b) you are allowed to test the program before deciding whether you want to splash out on it.

Available from: We credit the library who supplied us with the disk, but PD and shareware is available from various sources so feel free to 'shop around' for cheaper prices or a better service

Ratings bar: All reviewed software is given a percentage rating

IN BRIEF

Type	PD/Shareware/Licenceware
Author	A Genius
Requirements	512K • Hard disk
Disk number	101
Registration fee:	$10 (Shareware only)

Available from
We'll credit one source, but most disks are available from a number of libraries

COMPUTER 50%

AMIGA ONLY ULTIMATE PD ONLY 99P PER

★ DEMO DISKS ★

D264 - Shark Animation (1Meg)
D278 - Madonna Hanky Panky (P)
D240 - At The Movies (2 Meg)
D279 - More Aerotoons (1Meg) (P)
D280 - Amy V.S. Walker Anim (1 Meg)
D294 - Life Of Brian (P) (2 disks)
D297 - Anti Lemmin Demo (2 Meg) (2 disks)
D298 - Robocop Animation (1 Meg) (P)
D300 - Silents: Ice Demo
D254 - Virtual World (1 Meg)
D150 - Windsurfer Animation (P)
D315 - Mr Potato Head (1 Meg) (P)
D316 - Creature Comforts Demo
D318 - 3D Pinball Animation (1 Meg) (P)
D001 - Walker 1 (1 Meg)
D002 - Walker 2 (1 Meg)
D003 - Walker 3 (1 Meg)
D004 - Cool Cougar (1 Meg)
D012 - Rebels Megademo
D014 - Space Ace Demo
D023 - Stealthy 2 Anim (1 Meg)
D028 - Budbrain Mega Demo (2 disks)
D047 - RAF Megademo (2 disks)
D045 - Arse Wipe Advert
D059 - Red Sector Megademo (2 disks)
D062 - Red Sector Cebit 90
D077 - Good Morning Vietnam
D088 - Silents Megademo
D095 - Outsiders Acid Demo
D115 - Vision Mega Demo 4
D127 - Chubby Brown
D134 - Garfield Demo
D147 - Neighbours Slideshow
D148 - Viz Slideshow
D151 - Robocop 2 Slideshow
D153 - Epic Game Demo (1 Meg)
D158 - Operation Vark
D160 - Exodus Real 3D (1 Meg)
D163 - Probe Sequence
D164 - Slycath Amazing Demo Comp
D168 - Horizon Mega Demo
D169 - Budbrain Mega Demo 2
D176 - Jasper Carrot Demo
D184 - Dragons Lair 2 Demo
D185 Wrath Of The Demon Demo
D187 - Batman The Movie Demo
D251 - Decaying Paradise (1 Meg)
D264 - Hardwired (1 Meg)
D225 - Phenomena Enigma (1 Meg)
D231 - KGB Mega Demo (2 disks - 1Meg)
D237 - Silents - Global Trash
D240 - Vic Reeves Demo (2 disks)
D241 - Ray Of Hope (2 disks)
D247 - DMob It's A Lame Demo
D284 - Odyssey - Alcatraz (5 disks)
D312 - Anarchy - Seeing Is Believing
D325 - Hynautic Hammer
D327 - Greatest Demos Vol 1
D330 - Greatest Demos Vol 2
D333 - Greatest Demos Vol 3
D345 - It Came From The Desert Demo
D346 - Harry Meets A ST Owner
D347 - Shuttle Cock Animation
D354 - NASA Slideshow
D357 - KGB Mega Demo 2
D359 - Kefrens Guardian Dragon
D370 - Terminator 2 Slide Show
D379 - Navy Seals SlideShow
D388 - Track Ro Vectra

★ MUSIC DISKS ★

M001 - Seriously Good Music 1
M002 - Seriously Good Music 2
M003 - Seriously Good Music 3
M011 - DMOB Music 2
M012 - DMOB Music 4 (2 disks)
M014 - Rebel Megablast
M016 - Micromix 2
M022 - Amiga Charts Mix 3
M029 - D-Mob Music 3
M023 - Titan Trax 1
M026 - Amiga Charts Mix 5
M029 - D-MOB Music 3
M034 - Arnie Swarzenaggar Total Remix (2 disks)
M035 - Digital Concert 2
M036 - Digital Concert 3
M037 - Digital Concert 4
M038 - Digital Concert 5
M039 - Digital Concert 6
M040 - RAF Megamix 1
M042 - Bat Dance Remix
M049 - Ben Elton (xxx)
M057 - DMOB Music 1
M081 - Flash 2 (disks)
M102 - Debbie Gibson's Electric Youth (2 disks)
M114 - Betty Boo - Doing The Do
M121 - Band Aid 11 (2 disks)
M122 - RAF Beat Thiz 1
M123 - RAF Beat Thiz 2
M124 - RAF Beat Thiz 3
M125 - RAF Megamix 2 (2 disks)
M126 - Amiga Charts Mix 2
M127 - Amiga Charts Mix 6
M134 - Miami Vice Theme (4 disks)
M136 - Laurel And Hardy (2 disks)
M141 - JM Jarre - Definitive
M143 - CD Player Demo (1 Meg)
M144 - Flash! Queen (2)
M159 - Techotronic Remix
M161 - Crusaders Bacteria
M183 - ScooPex Beast Sonix
M157 - Digital Concert 5 (V1)
M151 - Crusaders: Genesis
M132 - Depeche Mode Mix Disk
M156 - Seal Crazy Remix (1 Meg)
M185 - I Think We're Alone
M186 - Everybody Dance Now
M187 - Doing The Do (Remix)
M189 - Amazing Tunes (1 Meg) (3 disks)
M190 - Move Any Mountain
M192 - Charly Remix
M193 - What Can You Do For Me?
M194 - Bruno Music Box (2 disks)
M195 - Manic Raves (2 disks)
M199 - Star Trek Theme
M201 - Journey Into Sound
M203 - Looney Tunes
M205 - Vogue CD Player
M206 - Flashing Bytes
M208 - Remember The Time (Remix)
M209 - Enjoy Live
M211 - Rave Around The Clock
M212 - Raver's Delight
M216 - Genesis
M217 - Dirty Digit Songs
M225 - Phil Collins
M226 - The Wall By Pink Floyd (6 disks)
M229 - Desire Lego Land
M230 - Manic Raves Remix
M234 - 808 State Remix
M241 - The Equiliser
M246 - Music Dream 2
M247 - Four Seasons
M248 - Flash Team Music
M249 - Move Any Mountain
M251 - Roger Ramjet
M253 - Crazy Looney Tunes
M260 - Old Soul Remix
M265 - Stand By Me
M269 - My Girl
M271 - Simply Red-Stars (2 disks)

★ UTILITIES ★

U001 - Sound Tracker Collection (3 disks)
U012 - Mega Utilities (175 utilities)
U024 - Sid Cli Utility
U039 - Amibase V3.76
U042 - Front Disk
U043 - Kim Database
U059 - Clip Art
U062 - Ultimate PD Copiers + Virus Killers Disk
U069 - Demolisher Utilities
U071 - D-Copy
U073 - Hard Disk Utilities
U074 - Easy Back Up And View 80
U075 - Pascal C Compiler
U078 - A500 + Utilities (For The A500 +only)
U080 - Turbotitle
U081 - S-Movie
U082 - Graphs
U083 - Drawmap V3.1
U085 - RBase II V5
U086 - Text Engine V3
U025 - Sid V1 6
U091 - Opti Utilities 2
U093 - PCQ Pascal
U094 - M.U.K V2.1
U095 - Zerovirus + Bootx V4.30
U096 - ST Emulator
U098 - Amibase V3 6.7
U099 - M-CAD
U101 - C Manual V2.00
U103 - Iconmania
U104 - Messysid 11
U105 - Insanity Tools
U106 - Imploder V4.0
U107 - N-Comm V1.921
U108 - Amiga MCAD
U109 - D Paint Cartoon Brushes
U111 - D Paint Font Disks (4 disks)
U112 - Ham Radio Utilities (5 disks)
U113 - Programming Disk (2 disks)
U117 - Sound Applications (2 disks)
U119 - Video Applications (2 disks)
U128 - The Comms Disk
U129 - D- Paint Clip Art (2 disks)
U130 - Video Graphics (4 disks)
U132 - Genealogy (1 Meg)
U066 - C-Light (1 Meg)
U135 - New Super Killers
U138 - Electrocad V1.4 Demo
U139 - Spectra Paint V3.0
U140 - Language Tutor
U145 - Database Master 2.0
U146 - Dynamite Brush Fonts
U147 - Textplus Word Processor
U149 - Med V3.10
U151 - Dice V2.06A
U152 - Pagesetter Clip Art (8 disks)
U154 - Night Flyers Utilities IV
U156 - Vector ball Editor (1 Meg)
U157 - Antivirus V3.14
U158 - Kids Paint
U159 - Text Engine
U160 - Windows Bench
U161 - PDS Utilities No1 Printing Utilities
U163 - NComme V1, 921
U164 - Work Bench 2+ Work Station
U165 - Video Screens
U167 - Cursor Basic Compiler
U168 - JRComm V1.02
U171 - Super C. Commands
U172 - P. Suite V1.4
U173 - The Ripper Guide
U174 - Jam Ripper V1.7 Jam Cracker V1
U175 - Beatrix Potter Clip Art
U177 - Thief Sound Ripper V3.0
U178 - Faulty Towers Samples
U179 - News Flash 21
U183 - Swag No 4: Fractals
U184 - Little Bench
U185 - Plotting + Graphics: Plot-X-Y

★ GAMES ★

U186 - Draw Map V3.1
G001 - Star Trek 3 (2 disks)
G006 - Breakout Construction Kit
G008 - Board Games (Monopoly etc)
G014 - Buck Rogers
G015 - Star Trek (3 disks, 1 Meg)
G016 - Tennis (1 Meg)
G020 - Train Set
G024 - Pipeline
G026 - Treasure Hunt
G031 - Drip!
G033 - Jeopard (1 Meg)
G034 - Dragon Cave
G037 - Seven Tiles
G038 - Pom Pom Gunner
G043 - Mental Image Games Disk
G056 - Strategy Games
G057 - Simpsons Game
G059 - Bionix II (1 Meg)
G062 - Atic Atac (1 Meg)
G065 - Battle Pong (1 Meg)
G066 - Frantic Freddie
G068 - Air Ace II
G069 - Down Hill Challenge
G070 - Llamatron
G071 - Sky Flyer
G074 - Revenge Of Mutant Camels
G075 - Jet man
G077 - Asteroids
G078 - Twintris
G079 - Card Games
G080 - Battle Cards
G081 - Mind Games 21
G083 - Sword Of The Warlock
G084 - Solitaire
G086 - Scramble
G087 - Dungeon On Nadroj
G088 - Royal Boulder Dash
G090 - Sub Attack
G092 - Mega Ball
G093 - Air Warrior
G095 - Super Skoda Challenge

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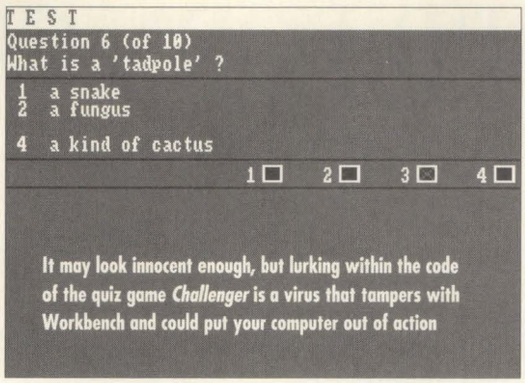
VISA

PUBLIC DOMAIN NEWS

TROJAN VIRUS CONTAINED ON RECENT FISH DISK



It may look innocent enough, but lurking within the code of the quiz game *Challenger* is a virus that tampers with Workbench and could put your computer out of action

One of the latest Fish Disks to be released has a trojan virus contained in one of its programs, claims the UK Virus Research Centre.

The as-yet unidentified virus is contained within the game *Challenger*, which appears on Fish disk 622, and has apparently been deliberately incorporated in the game's code by its German programmer.

The virus was discovered by the UK Virus Research Centre. There are two versions of the quiz game on the disk, an English and German version. The trojan is embedded within the code of the German game.

According to code held within the program the virus will become active on the 24th July. "If it comes into effect it changes the clock and locks the machine", said Michael Sewell of the UK Virus Research Centre.

The virus doesn't spread to other disks, but does attack the Workbench disk, which operates normally until the clock reaches the 24th July. Then, the virus' German message comes up, and the machine is rendered useless for the day. It does not appear to cause any lasting harm to the computer or any other files apart from those on the Workbench disk.

Floppy-based users can get round the virus by booting the machine with an unaffected copy of Workbench – the original disk should be kept in a safe place and write-protected. Hard disk users will have a tougher time getting rid of the virus, but the UK Virus Research Centre has put together a program to combat the problem by resetting the system files and destroying the virus. If you think your machine may have been infected, the combatant program is available free of charge – just send a blank disk and return postage to the UK Virus Research Centre at the address below.

There is no question of the disk itself not being an official Fish disk release, Mr Sewell said, as it has come through the normal distribution channels. While virus-affected disks are not unheard of in the public domain, it is unusual for such a well-known and widely distributed disk to be infected. However, because the virus code was embedded within the game it is not surprising it had gone unnoticed and wouldn't be detected by normal virus-checking programs.

The UK Virus Research Centre has contacted Scotland Yard to inform it of the virus' existance and has also been in touch with German police who are to take the matter further.

To find out more about viruses in general or if you think you may have been infected by Challenger virus, contact **The UK Virus Research Centre, Goldstar Computers, PO Box 2, Tuldesley, Manchester M29 7BN ☎ 0942 895320.**

Public Domain recommends that libraries, bulletin boards and users alike steer clear of this particular disk until it's given the all-clear.

What the virus does – things to look out for

According to the UK Virus Research Centre the virus contained within *Challenger* hides in the program file CHALLENGER_D.MAIN. The virus alters and moves the Setclock command from the c directory to the keymaps directory, renaming it 'A'. Both files are the same size, 4884 bytes.

There is also another part to the virus that affects the keymaps directory in the filename RCA which is 5328 bytes in size.

It lays dormant until the system clock reaches 24th of July, where the virus takes over and the computer locks up.

All the files have been compacted using the popular *Imploder* compression utility. Once the main file has been 'exploded', to return it to its original size, it is possible to use a disk sector editor, such as *NewZap* (which can be found on *Public Domain* cover disk 4), to examine the file in more detail. Wthin the main file is a string of German text that roughly translates to: 'Good day, this is the Guru inside your Amiga' – similar to phrases used by viruses.

Shareware seminar

The 1992 Summer Shareware Seminar is taking place between the 19th and 21st of June in Indianapolis, Indiana State, USA.

The three-day event will see people from all over the world converge on the city, including authors, publishers, sysops and users of shareware software. Over the course of the event there are to be discussions covering many aspects of shareware software, ranging from the writing of programs to the marketing of them. And for the first time the Shareware Industry Awards are to be presented to honour the best and most innovative shareware products from the last ten years.

Public Domain will be covering the seminar and its events in detail in a future issue. For more information about the event itself – but be quick if you want to attend – call **Bob Ostrander on 0101-317-856-6052**, taking into account the time difference between the US and this country.

Shareware shop

Now you can walk off the street into a shop and look at PD and shareware software running on a computer before you buy it.

Cleethorpes-based Classic Software stocks PD and shareware software for the Amiga, PC and ST. Customers can look at the software they're interested in on computers set up in the shop. All the software available is packaged and retails for £2.50 for PC disks and £2 for Amiga and ST disks.

The venture has been running for around three months now and proprietor Gordon Tucker hopes to expand into other towns in the South Humberside region. The company is also due to start operating a mail order service.

Classic Software can be found at 71 Park Street, Cleethorpes, South Humberside BN35 7NB ☎ 0472 359957

News hunting

Just as we need air to breathe the *Public Domain* news section needs news stories.

We're always on the look out for any snippets of news and information related to PD and shareware. If you've come across anything that you think willbe of interest our readers, then why not tell us about it?

Send your information to: **News, *Public Domain*, 30 Monmouth Street, Bath BA1 2BW.**

If you've got a modem you can also get in touch with us on a number of bulletin boards:

- **Bath BBS: 0225 840060**
- **01 For Amiga: 071-377 1358**
- **Shareware Support BBS: 0494 431861**

cont. on p6

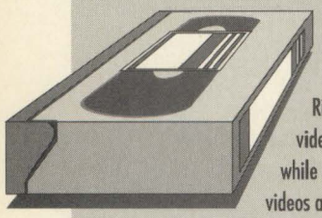
cont. from p5

Got it taped

Prodisc PD has created a new way of marketing its public domain programs: its catalogue comes on video.

The video catalogue has been jointly developed by Prodisc and Media Machine for the PD company using an Amiga combined with professional video equipment.

Along with the catalogue Prodisc PD has also released two compilation videos of animations from two of the most popular Amiga animators, Eric Schwartz and Tobias Richter. The catalogue video is priced at £3.95 while the two animation videos are £4.95 each.



For further details of the videos, turn to the demos section, page 58, where they are reviewed in greater detail. **Prodisc PD can be reached at 81 Middleton Hall Road, Kings Norton, Birmingham B30 1AG ☎ 021-628 1450**

Fontastic!

MS Images is a recently-formed company which produces licenceware disks containing fonts, borders and backgrounds for the Amiga.

There are ten disks in the company's range so far. "They all are 100 per cent full of borders, backgrounds or fonts," says proprietor Matthew Smith, "and are ideal for professional use, video titling or demos." All the images come in the standard IFF graphic file format.

All the disks in the range are priced between £2.50 and £4, depending on the amount of images provided on the disk. There is also a special offer to mark the launch of the disks. Three disks containing 30 fonts, 30 borders and 30 backgrounds are available for £7, instead of the normal price of £8.50.

For more information on the range, send an SAE to: **MS Images Update, 84 Averil Road, Leicester, LE5 2DB.**

George Thompson Services has also released a compilation of fonts into the public domain, entitled *Compugraphic Fonts Vol 1.*

The fonts are designed for use on the Amiga. The pack comes on three disks and contains a total of 37 fonts in the Compugraphic format. They are suitable for use in a wide range of DTP and other packages, as well as under Workbench 2.0 which has built-in support for the standard. GTS has plans for more packs to be released in the future so call the company for details.

The three disk set is available for £9.99 and can be obtained from: **George Thompson Services, Cucumber Hall Farm, Cucumber lane, Essendon, Herts AL9 6JB ☎ 0707 664654.**

PD PORN CONVICTION

Vinson Pike, proprietor of Virus Free PD, has been fined £1,000 for selling 'adult only' software on disk.

Pike admitted four charges of possessing obscene articles for publication for gain, and was fined £250 for each charge, plus £50 costs at Swindon Magistrates court on 24th April.

The case is historic in that it is the first time that the 1964 Obscene Publications Act had been used in connection with material stored on computer. It marks the end of an investigation that began with a raid on Mr Pike's home in July last year when computer equipment and disks were seized by the police.

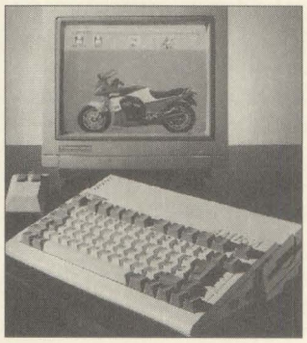
The result of the case is a definite deterrent for current and prospective purveyors of PD porn. Any one who advertises such products leaves themselves wide open for similar legal action to be made against them.

For more information about the background to this case, and on porn in the public domain in general, check out last month's issue, in which we ran an in-depth article on the subject.

AMIGA 500 PLUS 'DROPPED'

In a surprise move, Commodore has unofficially dropped the Amiga A500 Plus in favour of its new low-end Amiga machine, the A600.

Having been on the market for almost nine months, the A500 Plus was launched last September, creating something of a stir in the software industry with incompatibility problems. This was especially noticeable with public domain software, though the problems are much less commonplace with newer software.



Out with the old and in with the new. Commodore's A600 replaces the A500

The A600 has been completely redesigned compared to its predecessor. It's much smaller in size and doesn't have the numeric keypad which was present on the older machine.

The most radical development, however, is the inclusion of a 'smart card' slot in the left hand side of the machine. The new slot is for ROM cards which have software programmed on to them, enabling programs to load almost immediately. This takes the place of the expansion slot found in the A500, limiting expansion possibilities and rendering the new machine incompatible with the new A570 CD-ROM drive.

Software compatibility should be the same as the with A500 Plus, although the absence of the numeric keypad may cause problems for some programs. So, any software that is incompatible with the A500 Plus will not work on the A600 either.

Pricing for the A600 is £399 for the base machine which comes with 1Mb of RAM and a floppy drive, and £499 for the A600 which also has a built-in 20Mb hard disk. Both machines should now be available.

PUBLIC DOMAIN READER ADS

Next issue *Public Domain* is starting a Reader Ads section so you can contact all the readers of the magazine.

If you run a bulletin board, user group, or you want to sell some hardware or software, then this is the ideal way to contact people.

To advertise, just fill in this form with the details of your message and enclose a cheque or postal order for £5, payable to Future Publishing Ltd. It is also possible to pay by credit card.

Don't forget: Write only one word per box and make sure you include your telephone number!

Name .....

Address .....

.....

Telephone .....

I enclose payment of £5 by **Cheque** ● **P.O** ● **Access** ● **Visa** *(please circle)*

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CHESS	3D MENU	PAINTSHOP
WORDCUBE	POWERMENU	WINBATCH
STUD POKER	OMENU	FRACTAL
SORRY	*SPREADSHEETS*	BMP PICTURES
JACARANDA JIM	PC-CALC	SCREEN SAVERS
SHERLOCK	ALITE	ZIP MASTER
BASS FISHING	INSTACALC	*INTERESTS*
FROGGER	ASEASYAS	POOLS
PONTOON	PROCUBE	CRYSTAL BALL
MAHJONG	TURBO CALC	TEST YOUR ESP
BACKGAMMON	EZ-SPREADSHEET	GENEAOLGY

Order 2 Packs get the 3rd for £15 + £5.00 p&p.*

If ordering 20 titles circle them cut out the box and return.
If ordering packs please specify (A) (B) (C)

☐ 720k disk size ☐ 1.44k disk size ■ SORRY NO 5.25

Name _____
Address _____

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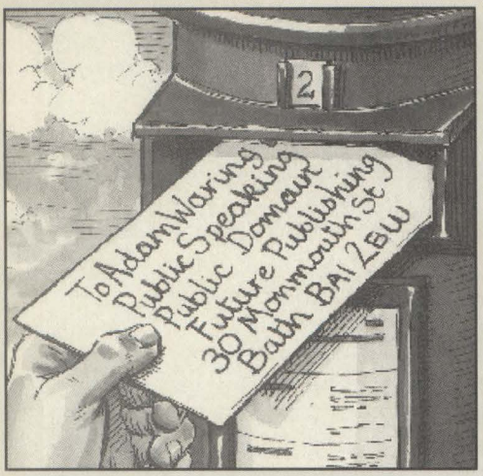

Public Speaking

What is there about the wonderful world of PD that, well, isn't so wonderful? If you've got an opinion you'd like to express, then this is the place to express it. Who knows, write the best letter of the month and you may even get a tenner for your troubles. (Just think of how many disks you could boost your collection by with that!)

So, what are you waiting for? Get your pen and paper out, write down your words of wisdom, put them in an envelope and send them to me, Adam Waring, at:

***Public Domain*, Future Publishing, 30 Monmouth Street, Bath BA1 2BW**

Take note

I have an idea that I think you at *Public Domain* should take notice of. I have often noticed when buying public domain and shareware programs for my ST that they are rarely produced with a professional finish; quite a lot of the games, for example, have very poor graphics and sound. This doesn't mean that the program isn't any good but I often feel more could be made of a program if it had a more polished finish. I certainly think that shareware programs could really give commercial ones a run for their money if they looked and sounded more professional.

The main reason for this lack of presentation is that most programmers work on their own, not only doing the coding and planning, but the graphics and sound as well.

I think the public domain scene would be a much better place if programmers and graphic artists and musicians could work together. It would be a good idea if *Public Domain* had some sort of contacts page where these people could get together by swapping addresses and so forth.

I am a graphic artist and would really like to work on games or demos etc, but don't know anyone who dabbles in ST programming so I would like to help anyone who can program but can't draw. If anyone needs a graphic artist to work with them on their games, get in touch!

Robin Ball
33/35 Whistley Road
Potterne, Devizes
Wiltshire SN10 5QY

At *Public Domain* we are concerned with promoting PD and shareware to show it in the best possible light. We're convinced that it has the potential to give commercial products a run for their money. We support anything that can be done to promote and improve its image.

In addition, PD is all about swapping disks between users, so I think that some sort of contacts page is a very good idea. Those interested in getting in touch with other users, whether to swap ideas, data or disks should write to: **Contacts, *Public Domain*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW.**

Don't forget to include all those important details: your name, address, and your interests. As soon as we have enough entries to make it a viable propostiosn we'll print them.

In the meantime, if you're a programmer who could do with having your programs tarted up in the graphics department, then get in touch with Robin at the printed address. **Adam**

Disk deal

First, I must say that now the cost of *Public Domain* has been reduced – one of my concerns about the magazine was its high cover price – I will be subscribing in the very near future.

I've read with interest the pros and cons on the cover disk debate. I think you have made the correct choice by dropping the disk. However, I feel that you could still provide a 'carrot' to tempt your readers.

I'm sure that with the reading power *Public Domain* can muster, you could strike up a deal with a couple of PD companies to accept tokens that you could print in your magazine. How about it?

M J Haddon
Easton, Dorset

Glad that we have your approval! Opinion on dropping the cover disk still seems to be fairly divided, but a significant majority seems think we've made the right decision.

PD libraries are supposed to charge a fee only for copying the disks and to cover the costs. I think it would be cutting it a bit fine to offer further discounts with schemes with various libraries. I also believe that it would be unfair for the magazine to make any such deals; as well as providing a service to our readers we have a responsibility to the libraries and everybody else involved in the public domain as well.

I think it's better to let the readers to make up their own minds about what software they want and where they get it, rather than offer special deals to encourage people to spend their money with any one library. For this reason we have to remain as financially independent from the libraries as we possibly can be. **Adam**

Raw deal

I am writing to complain about your magazine, *Public Domain*. As a proud owner of an Atari ST, your magazine offers me very little. After paying out for it I'd have been better off paying for a copy of *Penthouse*.

Practically everything in the May issue of *Public Domain* concerns the Amiga and PC, hardly anything for the Atari.

OK, this is the first copy I've bought and other issues could be all ST for all I know.

Paul Farrington
Melton Mowbray, Leics

Sorry you feel this way, Paul. We do try to cover all three machines in as even a balance as we can, though one format is bound to get the edge in any particular month.

May I suggest that you'd find far less of interest for your ST if you were to buy *Penthouse* magazine in place of *Public Domain*. **Adam**

That'll teach me

You were totally wrong – which is why you were absolutely right! – when you answered Sandra Bright's letter (Public Speaking, June 92). I think shareware does work and that is the very problem.

The shareware concept is, 'Try Before You Buy' – pay a small copying/distribution fee and evaluate the program. I think that's exactly what people do. The reason they don't register is not that they are dishonest but because they don't consider that many of the programs are worth the additional cost.

I frequently order shareware programs for £2, £3 or £4, use them one or twice and discard them. At that sort of price I can afford to try the different programs that may or may not live up to my expectations. But add a £25-£75 registration fee and it's a totally different matter.

I've bought shareware programs that were as good as or even better than commercial programs and I've registered them. I've also bought upgrades when available. But these excellent programs were the exception to the rule.

R Black
London

For people to even consider registering for a shareware program it has to be something that they're going to use. The evaluation period is exactly that; a month or so's 'free' usage where they can try it out and determine whether it's for them. Obviously, not everyone is going to decide that it's what they're really looking for, but this system is far better than deciding it's not what they want only after splashing out their money on an expensive commercial program. **Adam**

What's the password?

I have spent many long nights playing the addictive *Zeus* game from cover disk six. I have managed to finish it, so I think should put you all out of your misery by informing you of all the level passwords:

Level	Password
2	ECSTACY
3	SPECCI
4	PUBLICENEMY
5	RUNDMC
6	ICE-T
7	TONELOC
8	L. L. COOL J
9	THENEWSTYLE
10	WAS NOT WAS
11	BEATS INT.
12	MANTRONIX
13	DOUBLE DEE
14	VANILLA ICE
15	N. W. A.
16	DAISY DEE
17	BOMBTHEBASS
18	D. N. A.
19	ICE MC
20	M. C. HAMMER
21	TONY SCOTT
22	CHADJACKSON
23	NENECHERRY
24	BEATMASTERS
25	TECHNOTRONI
26	BETTY BOO
27	49ERS
28	AC/DC
29	SEX PISTOLS
30	OBITUARY
31	SACREMENT
32	JUDASPRIEST
33	DEEP PURPLE
34	TESTAMENT
35	SLAYER
36	SACREDITCH
37	MANOWAR
38	AERTZTE
39	HOSEN
40	BILLY IDOL

Please don't use any of these – that would be cheating!

Pigeon of the Technics
Co Antrim,
Northern Ireland

Thanks for the tips, Pigeon. Now we'll be able to prise Tim away from the Amiga and get him to do some proper work for once.

This opens up a wider issue; is there any interest in a section devoted to tips for public domain programs? It needn't necessarily be a section for games, but could cover handy hints you've discovered in other types of programs too. Let us know what you think! **Adam**

Porn free

We are writing in response to the article on pornographic software in *Public Domain* magazine.

As you will realise it was our library to which you sent your 'test' letter to see how easy it was to obtain X-rated disks.

We are not very happy about the printing of the letter used to order the disks as it clearly shows up our library's name. We have spent a lot of time and effort building up this collection.

We do not think that you have taken enough precautions to keep our name a secret as you have done for all the other PD libraries in your article. We feel that we have been unfairly treated by your lack of discretion.

We are not going to make any excuses for sending the disks without checking first. We freely admit that we should have made all the possible checks before sending the disks.

However, we wish to make the following statement:

"We have now removed *all* adult titles from our collection and have no intention of stocking or supplying any X-rated or offensive material."

We actually updated our May catalogue disk two weeks *before* the article was published with the X-rated software removed. We fully support your intentions to stamp out pornographic and offensive material from the public domain.

Margret Mitchell &
Harry Hutchinson
Aardvark PD
Loughborough

It's good to see that we've provoked some response from a library. Strangely, everybody else has kept quiet on the subject...

We did the letter test because we had to prove that it was possible for a young person to order this type of material.

We could have picked out any one of a number of PD libraries carrying such disks to send our sample letter to, and I'm sure the results would have been exactly the same. The fact of the matter is that anyone who's under age can obtain these disks because it is almost impossible to make any checks other than treating every order you receive with suspicion. The ultimtate answer is not to carry these disks in the first place. I'm glad to hear that you no longer trade in such material. **Adam**

Indecent exposure

I was very disappointed to see the massive coverage given to the PD Porn article in your last issue.

You say that you do not give out names of PD libraries supplying pornographic disks: "To do so would be to give unwarranted publicity to what we believe is a trade in filth."

A five-page article – with pictures on a larger scale than on any other page in your magazine – gives precisely that unwarranted publicity, creating further interest. I am not aware of your magazine having given this kind of coverage to any other issue.

I am a great fan of Future Publishing and believe that most of Future's magazines achieve their standards set out in their mission statement. However, I'm disappointed in the way you have handled this issue. This isn't the first article I have read – pornography is an issue which is discussed in pages of many magazines. However, they are magazines for adults. Your magazines, by their nature, are for a much wider age range.

For goodness sake, keep this in mind. Scanning the article with your potential readership in mind, I was particularly horrified to read the last sentence of the inset entitled, 'Why do they sell it?' There must be many a mother who would be deeply upset to know her son or daughter had been exposed to such images, whether written or photographic.

"Pornography has no place in the public domain where children can get hold of it so easily," you say. It's a pity that there is such a mismatch between your words and actions.

Susan Vale
London

Pornography, sadly, does exist. What's more it is commonplace in the public domain. Sure, we could ignore its existence entirely, but I think it's too important an issue for us to do that.

The responses we've had from various questionnaires we've run suggest that our readership is older than you seem to think; less than 10 per cent are under 16. If we appeal to the lowest common denominator all the time then we will be depriving the majority of our readership from articles that may well be of real interest to them and deserve serious consideration.

You're complaining about the size of the pictures used – but you couldn't see anything! We took great care to ensure that any images that people might find offensive were covered up. Of course, the content of the article may have had shocking statements in it, but with the nature of the article it had to.

I believe we covered the thorny subject of pornography well; we didn't sensationalise it and merely reported the facts of our research. I'd be interested to hear other readers' views. **Adam**

Credit where it's due

Just a line to say how much I enjoyed the Fractal issue (last month). I was especially pleased with the front cover picture which was taken from my *Fractal Chaos 1* demo on the Amiga. However, although I searched carefully through the magazine several times, I couldn't see my name credited anywhere.

Could you please, therefore, inform your readers where the picture was taken from or perhaps mention the demo, which is available from Xtra-Byte, 92A-B Rothbury Terrace, Heaton, Newcastle Upon Tyne NE6 5DB – the same company that provided the Fractal T-shirts and mugs in the same issue.

You may also like to know that *Fractal Chaos 2* is well on the way to completion.

Steve Hogg
Newcastle Upon Tyne

Consider it done! We'd be delighted to see the second of your *Fractal Chaos* demos when you finish it. Make sure that you send us a copy for review when it's ready. **Adam**

Help me PDQ

Are you having problems with your latest PD program? Or do you have a problem finding the program to do what you want? If this is the case, then get in touch with PDQ.

PDQ is our resident computer programmed especially to cope with all those perplexing problems. And Tim Howell, our techie expert who was born with a silver screwdriver in his mouth, is on hand to make sense of the garbled nonsense it churns out (it must have been programmed by a Radio 1 DJ). Send your queries to: PDQ, *Public Domain*, Future Publishing, 30 Monmouth Street, Bath BA1 2BW.

Programming & Utilities

Long-awaited sequels, surprise blockbusters and a couple of turkeys – yes, it's time to round-up the latest batch of serious, nuts and bolts software, and Tim Howell's the man who knows his DOS front ends from his sprite creators...

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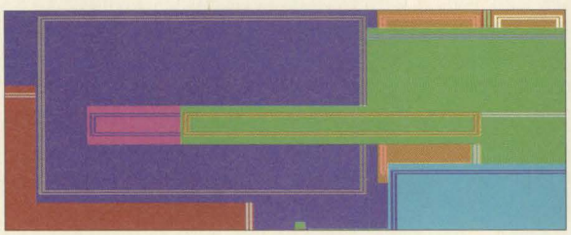
Rarely has a shareware program attracted so much attention or been so long awaited. What am I talking about? Well, *SID 2* of course, reviewed on page 14 of this very issue. The program has been rumoured for months and now, at long last, it's here. Thankfully it's been well worth the wait, not only surpassing its predecessor but also blitzing all the competition at the same time.

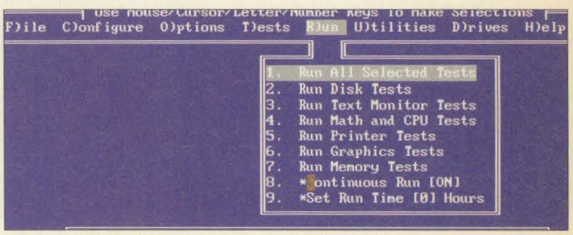
In fact, *SID 2*'s arrival could mark the beginning of a whole new level of shareware software, as nearly all aspects of the program can be customised. This is something that hasn't been seen to a great extent before on any machine or on any piece of software, and, yes, I *am* including the commercial stuff in my reckoning.

As for other software, we've also got the almost-obligatory DOS front end for the PC. *Director* is one of the better examples, though, and comes with a menu-creation program that's worth looking at in its own right. ST users can exercise their creative instincts with *Sprite Master* and *Sound Lab* which they can use for creating their own sprites and sounds respectively.

There's the usual mix of typical and not-so-typical programs that you wouldn't find anywhere else apart from the public domain. That's definitely not a bad thing – if it wasn't for PD software then you wouldn't ever have the opportunity of using these handy programs!



One of *BurnIn*'s many tests is to write a continuous string of characters and then draw boxes like these on-screen to test out the monitor display


F)ile C)onfigure O)ptions T)ests R)un U)tilities D)rives H)elp
1. Run All Selected Tests
2. Run Disk Tests
3. Run Text Monitor Tests
4. Run Math and CPU Tests
5. Run Printer Tests
6. Run Graphics Tests
7. Run Memory Tests
8. *Continuous Run [ON]
9. *Set Run Time [0] Hours

All *BurnIn*'s functions are achieved via pull-down menus which enable you to run all of the tests either individually or in a definable sequence

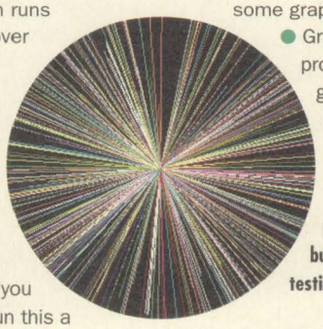
BurnIn

One of Murphy's Laws states that if something is not supposed to happen, it will happen, and at the least opportune moment. This is often the case with warranties; no sooner has your toaster's guarantee passed the 30-day mark and it refuses to cook your breakfast. The same thing can happen to a much more expensive piece of equipment: your PC.

BurnIn has been designed to be a form of insurance against this happening. The program runs several different tests over long periods of time, subjecting your PC to what would be several months of normal wear and tear in just a couple of days. It hasn't been designed to fix any flaws if they crop up, but at least it warns you about them. So, if you run this a couple of days before your PC's warranty runs out, then you may save yourself an expensive repair bill.

Here's a run-down of the tests the program has on offer:

- CPU test – this computes a calculation thousands of times, incrementing the calculation as it goes with the resultant numbers appearing in columns on-screen.
- Drive test – once you specify the disk drives you want to test, *BurnIn* writes and then reads a 32K text file on each drive, deleting it automatically once the test has finished.
- Monitor test – this exercises both the monitor and display adaptor by writing a continuous string of characters to them, then drawing some graphic boxes.
- Graphics test – the program runs a series of graphics tests, exercising both the monitor, display and system BIOS. The program automatically senses the display adaptor and adjusts the tests to suit it.
- Printer test – this sends a page of random ASCII characters to your printer.



This picture looks out of place for a utility program, but it's *BurnIn*'s way of testing the graphics card

Any of these tests can be run either individually, all at once or in groups; you decide using the program's pull-down menus. *BurnIn* keeps a log file of what it finds, if anything, or it can keep separate details of each test. These files can be reviewed at any time by the user. All this and the program displays some pretty patterns while it's at work, too!

The programmer, George Campbell, recommends that you run *BurnIn* at different stages in your PC's life: for 72 hours when you first get it; for 72 hours the week before the warranty expires; and for 24 hours each time you add new hardware to the machine. He claims that running the tests for long periods can't damage your computer as they only use normal DOS and BIOS routines, and do not exerting the machine in any non-standard ways.

Registration entitles you to the latest version of the program, notification of updates and telephone support. It's not a program you'll run often, but it could save you a lot of grief, so £8 is a reasonable price to pay.

IN BRIEF

Type	Shareware
Author	George Campbell
Requirements	512K • CGA
Registration fee	$15 (£8)

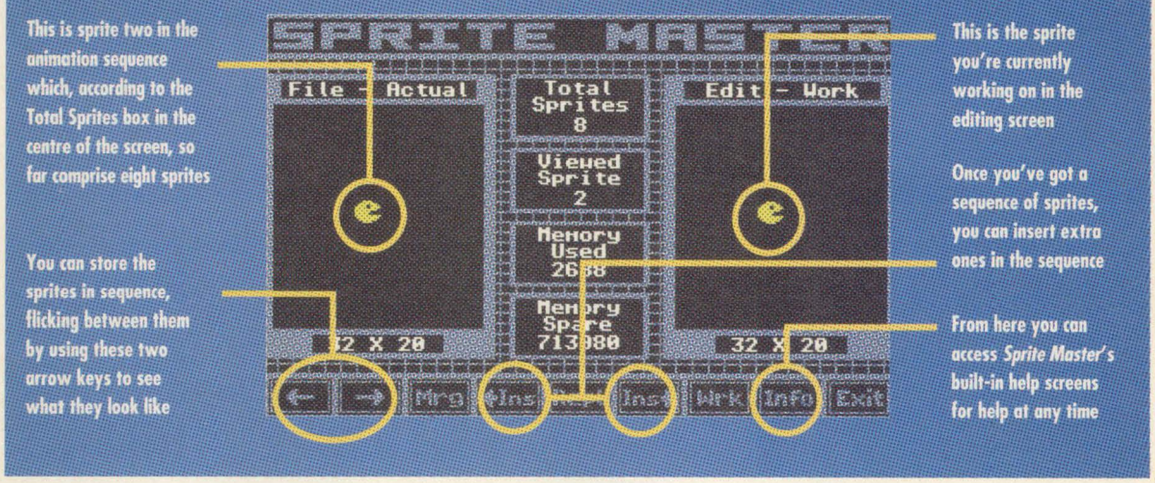
Available from
Nildram Software, 26 Stanley Hill Avenue, Amersham, Buckinghamshire HP7 9BD ☎ 0494 432342

PC 70%

Want to draw some sprites for your latest game? Would you like to string these sprites together to animate them? Or do you just want to create your own icons? If you do, then Sprite Master may be able to help...

Getting things on the move with the animation functions

All *Sprite Master*'s main functions are accessed from this central screen. Here you can create animations by editing the sprites slightly then placing them in a sequence. Here are a few of the functions available...


This is sprite two in the animation sequence which, according to the Total Sprites box in the centre of the screen, so far comprise eight sprites
You can store the sprites in sequence, flicking between them by using these two arrow keys to see what they look like
This is the sprite you're currently working on in the editing screen
Once you've got a sequence of sprites, you can insert extra ones in the sequence
From here you can access *Sprite Master*'s built-in help screens for help at any time
SPRITE MASTER
File - Actual
Total Sprites 8
Viewed Sprite 2
Memory Used 2688
Memory Spare 713980
Edit - Work
32 X 20
32 X 20
Mrg
Ins
Del
Wrk
Info
Exit

Sprite Master

Sprites are an essential part of any game. Whether they're the main character, enemies or even bullets, without them most games would be impossible to create. If you're a programmer, there are several ways you could make your own sprites: you could use an art package to draw them and then import the data into your program; you could write your own sprite designer; or you could use this competent offering from Budgie.

Sprite Master has been specially designed to make the process of drawing and using your own sprites much easier. The package incorporates the main sprite editor which you can use to design the sprites, and there is also an animation section where you can string the various sprites you create together to produce your own animations. Annoyingly, though, you can't actually watch them; you have to use your programming knowledge to import the sprites into your own program and then display and sequence them from there.

You create and view your sprites using two main editing screens, with another screen used to arrange the sprites and their paths if you want to use them in your animations. Everything is mouse-controlled which means you can jump in and out of editing screens as well as draw the sprites.

The main sprite creation screen looks more or less like the norm when it comes to this sort of program. There is a grid in which each square represents an individual pixel where you draw your sprites on the left side of the screen. The colours available to you are displayed at the bottom of the screen along with the different moving and editing commands. On the right side of the screen is a 'normal' view of the sprite; not in a grid format but as it would look on-screen.

There are a couple of points about the program that can make it difficult and frustrating to use, at least until you get used to working around them. *Sprite Master* treats the mouse very sensitively and this can be a problem: if you want to delete a single sprite from an animation, and you press the mouse button to delete it, you may end up deleting several by mistake. And there's no Undo function to correct mistakes. One way to get round this is to save your data as often as possible.

I'm also not overly keen on the way the program works in general. You having to flick through different screens to edit and set up the sprites and animations which can take some getting used to.

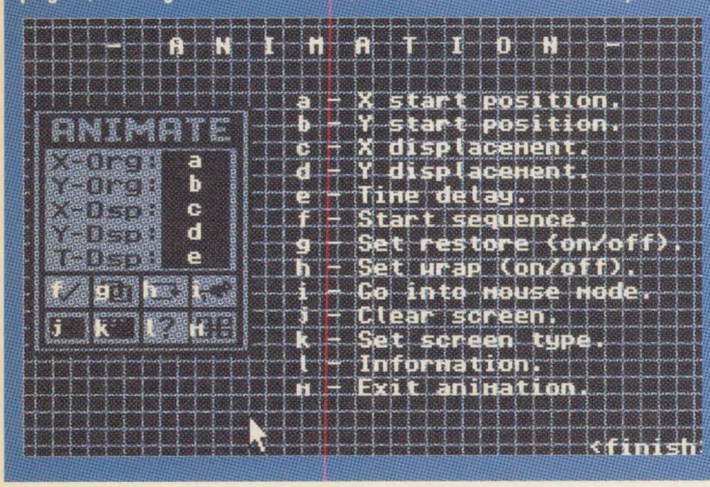
As well as sprites, the programmer also recommends that you can use the program to create fonts and your own icons. This would require a mid- to high-range of knowledge on the part of the user, but the possibility is definitely there. To help demonstrate some of these other uses, there are a few sprite files on the disk that have been created using *Sprite Master*, and one of these is a set of icons.

Sprite Master is a capable program that can be used, in theory, for a variety of purposes. The main problem is that if you're a serious programmer capable of using the sprites the program enables you to create, then you're probably capable of creating your own sprite editing program to suit your tastes. That said, *Sprite Master* is good at what it does, so if you're a bit of a lazy programmer, it's worth checking out.

If you get stuck in the program, what can you do?

One of the main points in *Sprite Master*'s favour is its built-in help screens. Not only do these explain the main elements of the program, including what the icons mean, but also include details of how you can use the sprites you create. All too often it seems that utilities such as sprite designers and animation packages, supposedly designed to help you create elements for your own programs, omit the information which enables you to actually import them into your programs leaving you to decipher the sprite data yourself. When this sort of thing happens you might as well have designed your own custom sprite-making tool in the first place; if you know how to decipher sprite data you're probably more than capable of creating your own programs, anyway.

But all credit for *Sprite Master* which contains all the information you need to use your sprites in assembler and BASIC programs, and their data structure is also explained.

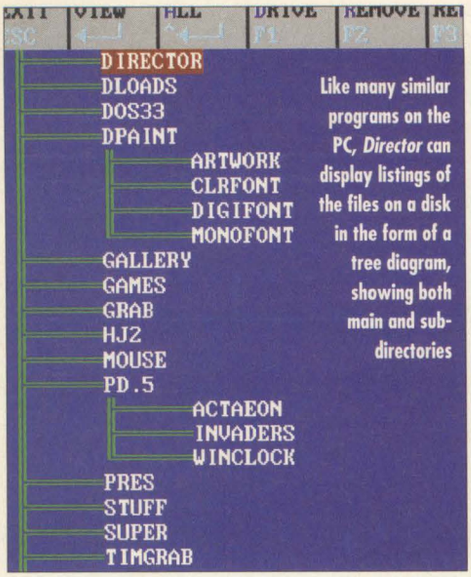


IN BRIEF

Type	Licenceware
Author	Chris Skellern
Requirements	512K and mono
Disk number	PR03
Price	£3.95

Available from
PDST, 95 Elton Road, Sandbach, Cheshire CW11 9NF ☎ 0270 762520

ST 82%



Like many similar programs on the PC, *Director* can display listings of the files on a disk in the form of a tree diagram, showing both main and sub-directories

Front ends for the PC are commonplace in the public domain, but Director is a multi-part package that's one step ahead of the rest...

Director

Why is it that the majority of programs available in the public domain for the PC are designed to make the computer easier to use? DOS isn't *that* unwieldy, surely? (No, don't answer that!) *Director* is yet another front end for the machine, but with a difference; it doesn't perform file operations but rather adds menus that let the user run programs at the press of a key.

Director consists of four programs: three file and directory management tools and a menuing program. The first three basically perform the same functions but in slightly different ways.

DL is the main program and is an all-inclusive hard disk and file management tool. When run it displays all the files of the disk you're currently using in the form of the now-familiar directory tree. It provides various functions, including the ability to Delete, Move, Hide and Search for files, as well as being able to print out a hard copy of the directory tree. The program saves a copy of the directory to disk and updates it when any changes are made, so when you want to examine the directory it appears on-screen instantaneously. *DL* also offers the option of displaying all files on a disk that are identical, which is handy if you are wondering where all your disk space has gone...

Accessing the program's functions is achieved using either the keyboard or a mouse. All the functions are represented by buttons along the top of the display. To activate the functions you can either click on these buttons with the mouse cursor or use keyboard shortcuts.

Ingenious use is made of the cursor keys; you can scroll up and down the file listing as you would with any other program, but the left and right cursor keys are used for marking and unmarking programs to which you want to do something. Simple, but effective.

DL is the most powerful of the three directory-based programs offering not only file and disk-related functions but also enabling you to run programs directly from the directory listing. The other two are similar in their mechanics, but they differ in just how much you can do with them. *DB* is more or less a cut-down version of *DL* as it has no tree diagram and can display only individual directories on-screen at once. *DA*, the third program, will show all the files on-screen and has all the standard file-management functions found in the other two programs.

The fourth program in the *Director* set is *DM*, a hard disk menuing system. With *DM* you can create a menu for your hard disk enabling you to load programs at the touch of a key. The main menu can consist of up to 20 entries, but each of these can have unlimited sub-menus of up to 20 entries each.

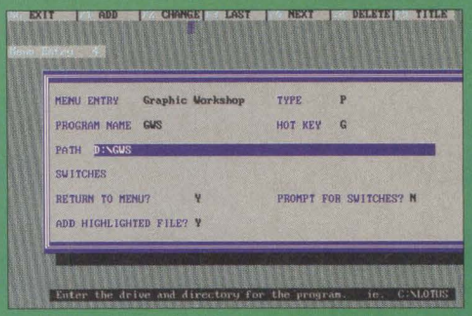
Director's four parts all combine to produce a well put-together and powerful package. While three of the tools are similar, their slight differences mean that each can be useful in certain situations. Indeed, the author of the program, Dan Baumbach, uses *DB* as a replacement for the DIR command. While this may be a bit extreme, it really comes down to what you want to use the program for – at least you've got a choice.

At a registration fee of $40 (about £25) *Director* doesn't shout out value for money but it's not an exorbitant price. This is where the shareware concept is of real benefit, giving you the opportunity to try before you buy. *Director* is a very competent package, easy to control and easy to set up, and definitely worth checking out.

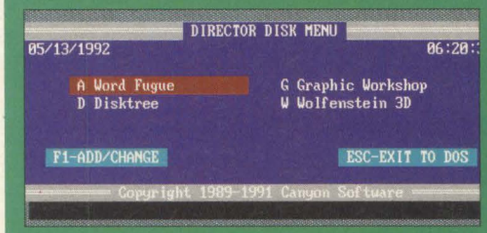
What's on the menu tonight?

Of the many similar programs available for the PC, *DM* is one of the best in terms of how easy it is to set up a menu. Each menu you create consists of several items, each of which has to be entered one at a time. You enter such details as the name of the program you want to run, the path the menu has to use to find it and the filename that has to be executed once it's followed that path.

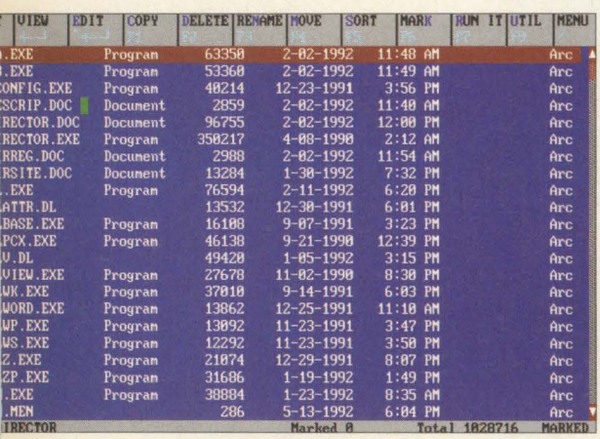
Once you've finished the entry for one program you are automatically prompted to enter the next. As long as you can remember the filenames and the paths of the filesand programs you want to include – you may have to resort to good ol' pencil and paper at this point – then a handy, attractive menu can be set up in just a few minutes. The effort put in now will be repaid later.



From this screen you can edit the name, type and path of the program which will be loaded from the menu...

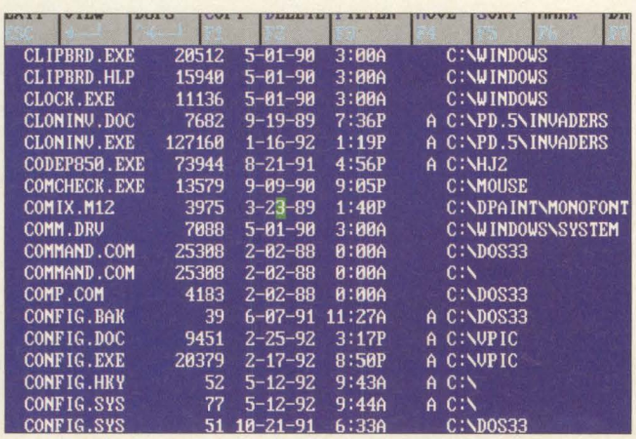


...that looks like this when it has been completed. You can load programs by using either the keyboard or mouse



.EXE	Program	63350	2-02-1992	11:48 AM					Arc
.EXE	Program	53360	2-02-1992	11:49 AM					Arc
CONFIG.EXE	Program	40214	12-23-1991	3:56 PM					Arc
CSCRIP.DOC	Document	2859	2-02-1992	11:40 AM					Arc
RECTOR.DOC	Document	96755	2-02-1992	12:00 PM					Arc
RECTOR.EXE	Program	350217	4-08-1990	2:12 AM					Arc
REG.DOC	Document	2988	2-02-1992	11:54 AM					Arc
RSITE.DOC	Document	13284	1-30-1992	7:32 PM					Arc
.EXE	Program	76594	2-11-1992	6:20 PM					Arc
ATTR.DL		13532	12-30-1991	6:01 PM					Arc
BASE.EXE	Program	16108	9-07-1991	3:23 PM					Arc
PCX.EXE	Program	46138	9-21-1990	12:39 PM					Arc
V.DL		49420	1-05-1992	3:15 PM					Arc
VIEW.EXE	Program	27678	11-02-1990	8:30 PM					Arc
WK.EXE	Program	37010	9-14-1991	6:03 PM					Arc
WORD.EXE	Program	13862	12-25-1991	11:10 AM					Arc
WP.EXE	Program	13092	11-23-1991	3:47 PM					Arc
WS.EXE	Program	12292	11-23-1991	3:50 PM					Arc
Z.EXE	Program	21074	12-29-1991	8:07 PM					Arc
ZP.EXE	Program	31686	1-19-1992	1:49 PM					Arc
.EXE	Program	38884	1-23-1992	8:35 AM					Arc
.MEN		286	5-13-1992	6:04 PM					Arc
IRECTOR			Marked 0		Total 1028716				MARKED

One of the programs in the *Director* set, *DB* can only display the programs contained in individual directories on-screen



CLIPBRD.EXE	20512	5-01-90	3:00A	C:\WINDOWS
CLIPBRD.HLP	15940	5-01-90	3:00A	C:\WINDOWS
CLOCK.EXE	11136	5-01-90	3:00A	C:\WINDOWS
CLONINV.DOC	7682	9-19-89	7:36P	A C:\PD.5\INVADERS
CLONINV.EXE	127160	1-16-92	1:19P	A C:\PD.5\INVADERS
CODEP850.EXE	73944	8-21-91	4:56P	A C:\HJ2
COMCHECK.EXE	13579	9-09-90	9:05P	C:\MOUSE
COMIX.M12	3975	3-23-89	1:40P	C:\DPAINT\MONOFONT
COMM.DRV	7088	5-01-90	3:00A	C:\WINDOWS\SYSTEM
COMMAND.COM	25308	2-02-88	0:00A	C:\DOS33
COMMAND.COM	25308	2-02-88	0:00A	C:\
COMP.COM	4183	2-02-88	0:00A	C:\DOS33
CONFIG.BAK	39	6-07-91	11:27A	A C:\DOS33
CONFIG.DOC	9451	2-25-92	3:17P	A C:\VPIC
CONFIG.EXE	20379	2-17-92	8:50P	A C:\VPIC
CONFIG.HKY	52	5-12-92	9:43A	A C:\
CONFIG.SYS	77	5-12-92	9:44A	A C:\
CONFIG.SYS	51	10-21-91	6:33A	C:\DOS33

Using *Director* it is possible to display a directory of all the files on a disk, including files with the same name, making it easy to keep track of duplicates

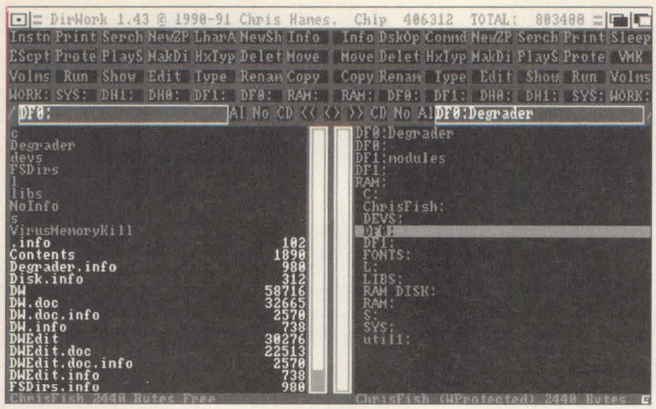
IN BRIEF

Type	Shareware
Author	Dan Baumbach
Requirements	384K • CGA
Registration	$40 (£25)

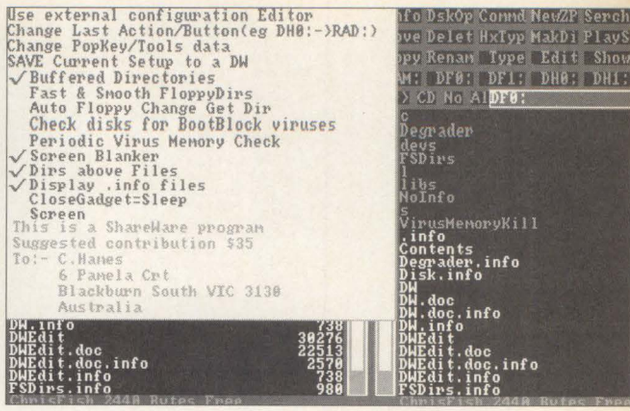
Available from
Nildram Software, 26 Stanley Hill Avenue, Amersham, Bucks HP7 9BD
☎ 0494 432342

PC **79%**

File and disk operations can be made easier with the help of front ends, but can these front ends be made any easier to use? Maybe they can...



DirWork is the main program from which everything is controlled on the *Chris Hames' Utilities Disk*, letting you access these programs from buttons at the top of the screen



Many of *DirWork*'s functions can be set from this rather large pull-down menu which makes customising the program easy

Chris Hames' Utility Disk

Usually I don't look at complete packages of programs, mainly because most PD libraries put similar programs together on to their own compilation disks. This time I'll make an exception, though, because while this is a collection of programs, it comes in an original format; the disk's compiler, Chris Hames, has also written a dinky little piece of software from which all the others can be run, and which also stands up as a program in its own right.

DirWork, operates in a similar way to many of the other front-end-type programs on the Amiga, enabling you to accomplish relatively simple disk and file operations and run other programs with a click of the mouse button. These functions are pretty standard for such programs, but what sets *DirWork* apart from the others available is the way it can be customised. Admittedly, other programs, such as *SID*, can do similar things, but these are often more difficult to set up and aren't as flexible.

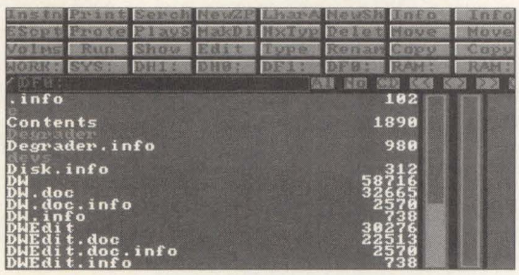
Taken as a complete package, the tools that are provided on the disk are very useful. For a start there is the disk and file editor *NewZap*, which enables you to examine files byte by byte. There is also *IntuiTracker* which enables you to play a soundtracker module in the background while you are using another program. Other, minor tools on the disk include ones that let you play sound samples, compile and extract archived files (using a variety of archivers), or search for text strings in files.

DirWork can be set to sleep, remaining in memory so that the press of a set of keys (which you can define) will bring it up again. When the program is sleeping, provided you've got enough memory, you can run other programs, returning to *DirWork* when you want.

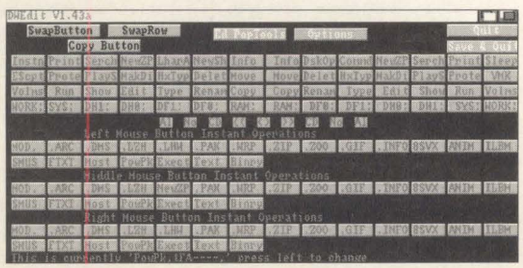
An unusual feature is the program's use of mouse buttons. When highlighting a program, you can use the left and right buttons to make various things happen. For example, if you click on a file with the suffix LZH, the program will automatically register that it is an *LHarc* archive and, if you pressed the left mouse button, will attempt to create an archive, while if you pressed the right, it will try to extract the file. Some functions also make use of the middle mouse button if you have one of those rare beasts, a three-buttoned mouse.

Like similar utilities, *DirWork* recognises different types of files. If you want to view a text file, just click on it and the program will display it on-screen; likewise, if you want to view a picture, all you need to do is click on the file. There are several other recognised file types, including *Noisetracker* MOD files, a variety of archived files, and GIF graphics and SMUS music files. To use some of these files *DirWork* has to run other programs, while for others the program can handle them by itself.

There are also built-in disk copying, formatting, and installing options; these are standard features for this type of program but it would be a pretty poor example if it didn't have them.



Mmm, a lovely colour-co-ordinated screen here to demonstrate that the colours of *DirWork* can also be changed to suit your tastes...



The left, right and, if you have one, middle mouse buttons can have different functions when certain buttons are selected

While most of these options are accessible from menus, keyboard shortcuts can also be set up. So, you could press the left Amiga key and T, say, to run a text editor. Setting up these shortcuts adds the programs to *DirWork*'s menu, and if you've got Kickstart 2.0, you can access them from the Tools menu as well.

There are a few nice touches within the program itself. It can be set up so that it will display the directory of a disk as soon as it's put in the disk drive. The program can also be set up so that when it lists the files and directories on a disk it can display them either in alphabetical order or with the directories in order at the top and the files at the bottom.

Another nice touch is the way *DirWork* keeps track of the directories you have used. It stores the names of the directories and their contents in memory, enabling you to select between them at will.

On the downside, *DirWork*'s screen layout can be confusing. The display is split into two halves for the source and destination devices, and most of the standard 'button' commands are displayed on both sides of the screen. Fair enough, but there are some commands that aren't common to both sides and these are almost hidden in the corners of the screen. In a similar vein, the buttons that are on-screen are five letter abbreviations of the programs that can be accessed, and until you get used to what they do their functions can be a bit of a mystery.

The other programs on the disk are by a number of authors and are a mixture of PD and shareware. Chris Hames' very own *DirWork*, the disk's main program, is shareware. Registration costs AUS$35 which entitles you to a disk containing the next version of the program once it becomes available. If you use the other tools on the disk regularly as well, you are obliged to register them to.

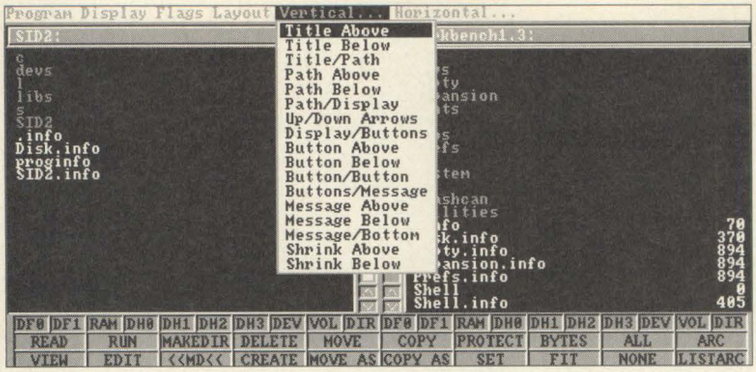
DirWork and the files that come with it aren't outstanding when looked at separately, but the way they work together makes the disk a functional and easy to use package.

IN BRIEF

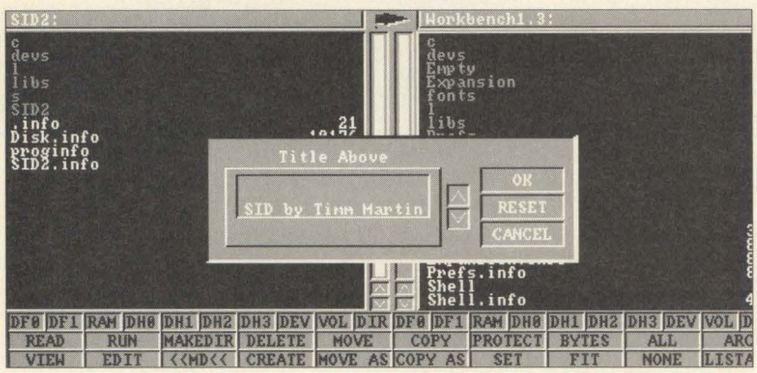
Type	PD/Shareware
Author	Various
Requirements	512K

Available from:
George Thompson Services, Cucumber Hall Farm, Cucumber Lane, Essendon, Herts AL9 6JB ☎ 0707 664654

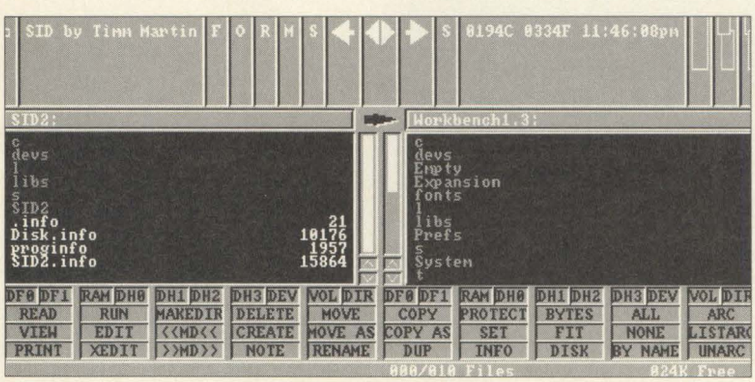
AMIGA 81%



SID 2 can be customised to a great degree – when you select Layout from the Prefs menu you can change even the tiniest details, such as the amount of spacing above the title display



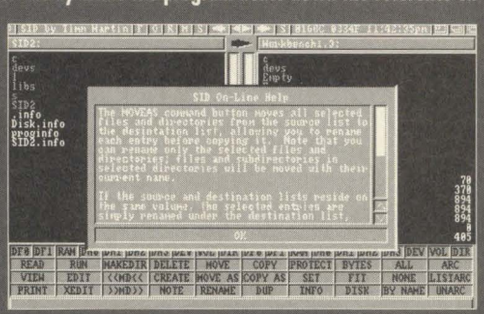
To adjust the spacing, it's simply a matter of clicking on the arrow buttons to move the boundary. Once you've got the spacing the way you want it just click on OK and *SID 2* will use the setting



This is the end result, as seen on-screen. While this layout isn't overly attractive or useful, it does show how just how much *SID 2* can be customised, and how easy it is to do

On-line Help – just a key-press away...

In what marks an amazing achievement for a shareware program, *SID 2* comes with a 200K help file. This document can be called up at any time from within the program by holding down the Ctrl key and then clicking on the function button you want to learn more about. After a short delay while the program hunts down the reference on the disk a menu pops up on-screen containing a description of the function you have highlighted plus details about how it works. These descriptions are often longer than the available space in the menu, requiring you to scroll through the text, but they are very thorough, and extremely useful.



Comprehensive details of most of *SID 2*'s functions can be obtained easily, so if you're puzzled there's a way out...

SID 2

It's here at last, the program that Amiga owners have been waiting for: SID 2, the sequel to the famous file utility SID which has graced many an Amiga owner's PD collection. If you thought the original was good wait 'til you get a load of this. It's been improved in so many ways...

This has got to be one of the most long-awaited shareware programs of all time. *SID 2* is the latest version of the classic Amiga utility *SID*, a utility much-lauded in these hallowed pages and the recipient of a 92 per cent rating way back in issue one.

SID 2 is not so much an update as a total rewrite. The author of the program, Timm Martin, has worked for

"SID 2 is state of the art and a creates new benchmark in PD software."

2,900 hours and has compiled over 2.9 million bytes of code to create this awesome sequel. The program includes all the features of its predecessor, *SID 1.06*, and adds a whole lot more, including a context-sensitive help option and full compatibility with Workbench 2.0.

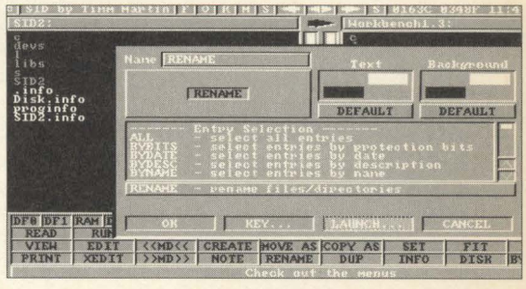
In case you've been somewhere else for the last three years – after all, *SID* was released way back in December 1989 – the program is basically a front end for the Amiga. Programs such as *SID* enable you to achieve both simple and complex disk and file operations easily, using the mouse instead of the complex syntax commands of the command lin, making the Amiga much easier to use for novice and veteran users alike.

Three versions

Unusually for a program in the public domain, there are three different versions of *SID 2*. *SID 2 Personal* is the most basic, it works on unexpanded Amigas, but doesn't let you edit or save the preferences. *SID 2 Trial* lets you edit the preferences and use them, but you can't save them. *SID 2 Professional* is the version that you get when you register. It needs a megabyte to run and enables you to edit and save the preferences. It also comes personalised with the name and address of the registered user.

There are also two versions of *SID 2 Trial*, one for owners of Amigas equipped with Kickstart 1.3; the other for those with Kickstart 2.0.

When *SID 2* loads there is an immediate difference between it and its older relation. The various buttons that are placed around the main screen look indented, creating a Workbench 2.0-look on an older 1.3 Amiga. The pull-down menus are also more complex, enabling you to access help and registration information as well as edit the program's preferences, among other things.



The characteristics on individual buttons can also be customised easily, right down to their colours and actual file function

The program retains the layout of the earlier *SID*, with the screen split vertically down the middle, with source files and directories displayed on one side and destination files and directories on the other. At the bottom

Customise your preferences – answer questions to set up SID 2 with ease

One of *SID*'s abilities is that it has always been able to load external programs to achieve certain functions. So, if you want to view a text file or display a picture on-screen, for example, then *SID 2* has to be told which text viewer and which picture viewer to load in order to do it.

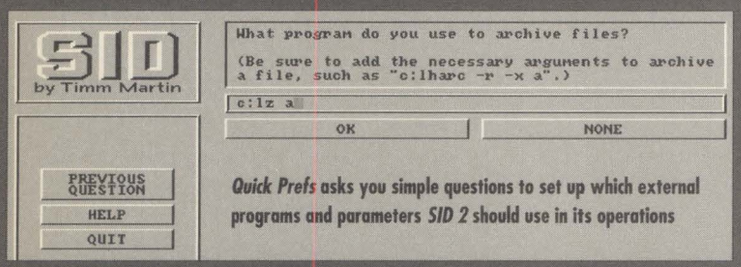
While most aspects of *SID 2* can be customised from within the program itself, if you want to make use of external programs then you have to use a separate program called *Quick Preferences* to set things up.

With *Quick Preferences* you can create a configuration file that will tell *SID 2* what programs to use for these functions, including their file paths and any other parameters that have to be included. These range from loading simple programs, such as a text editor, or complete strings of parameters for controlling archiving utilities.

Once these settings have been made the preferences can be saved for when you load the main program – it will use the new settings right away.

***Quick Preferences* is straightforward to use, asking you questions one at a time which you have to answer to set up the main program. *Quick Preferences* prompts you for a function and all you have to do is provide the path and the name of the program you want to use for that function. If you make a mistake when you're editing the data you can easily return to the screen and correct the mistake simply by clicking on a button.**

After all the information has been inputted you are given the option of saving it, and you're ready to load your own customised version of *SID 2*. All of these changes are accomplished easily, emphasising the progress that has been made since *SID*'s first release.



***Quick Prefs* asks you simple questions to set up which external programs and parameters *SID 2* should use in its operations**

of the screen are four rows of buttons from which you control the program.

Additional features

Examining these buttons a bit more closely reveals some additions to the program's command repertoire. These

"Virtually anything can be customised, ranging from the spacing between the menus, the size of each of the menus and buttons."

include the Copy As and Move As commands which give you the option of changing the name of a file before you move or copy it. This handy because the sometimes the Amiga will refuse to copy certain files because it doesn't like what they're called.

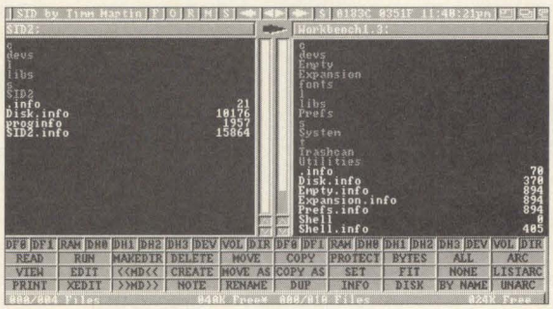
Further button commands can be accessed by pressing the right mouse button while in the bottom area of the screen. With the program's ability to be customised – more on this later – it's possible to shrink the physical size of these boxes to fit in even more commands, so in theory you could have over 90 commands accessible in this way if you use all of the buttons.

Like the earlier *SID*, the program can recognise a large number of file types, such as different archive types and files created by a number of popular applications, including *Powerpacker* and a number of commercial programs. This is handy if you can't remember which application created a file or if you're just curious to see what it is.

One of the highlights of the package is the degree to which it can be customised. Virtually everything can be altered to suit your tastes in presentation ranging from standard customisable features like the colours and screen resolution to more obscure settings such as the spacing between the menus and the size of the buttons. There can't be many programs out there that can be customised to such a great degree, PD or commercial.

All *SID 2*'s built-in preference options – which include the program's colours, fonts, menus and layout – are accessed from pull-down menus and sub-menus. Once an option has been selected further pull-down menus are accessed from the top of the screen. It's a simple way of doing things and it means that the screen doesn't get cluttered with too many options, or that the settings become too confusing to use. Other options, mainly to do with what commands *SID 2* sends to any external files it uses, can be set using *Quick Prefs*, a separate program.

When performing operations such as copying files, a bar comes up on-screen showing graphically how far the copying process has progressed. This is yet another handy extra not included in the original program.



While *SID 2* looks a lot like its predecessor there are a lot of changes underneath the exterior. A glance at the buttons gives you some idea...

Worth the wait?

In fact, compared to its predecessor, *SID 2* is a much better program. In many ways this is inevitable as *SID* was released almost three years ago, but at the same time it's good to see that Timm Martin hasn't rested on his laurels and produced a new version with only a few differences. *SID 2* is a major upgrade, make no mistake.

Registration for *SID 2* costs $25 (about £15) which is far less than a comparable commercial program. Considering the time and effort that has gone into writing the program, not to mention what it can do, this is a very reasonable price to pay. When you register you not only receive the version of *SID 2 Professional* mentioned earlier, which has your personalised details and enables you to save preferences, but there are other benefits. These include receiving the any further upgrades to *SID* and its support programs, complete documentation and free access to the SID Electronic Bulletin Board which will enable you to get in touch with the author.

SID 2 represents a definite advancement in PD and shareware software. It is a well-supported and constructed program. In short, *SID 2* is state of the art and a creates new benchmark in PD software.

The competition – has SID 2 blown them all away?

In short, there isn't any competition; at least not any more. The earlier version of *SID*, *SID 1.06*, was good in its own right and it spawned a number of imitators, both PD and commerciail, most of which couldn't come anywhere close to *SID*.

Some of these we have reviewed in the pages of *Public Domain*, such as *M2Du* which was reviewed in issue five, but it was complicated and not all that easy to customise. *Diskmaster 3.2* was reviewed in issue three and got 78 per cent, mainly because of the number of functions it has built-in, not needing to load other external tools. There are others, both old and new, but again these have paled in comparison to the mighty *SID*.

There are even several commercial offerings that *have given SID a run for its money*, such as *Directory Opus* from Inovatronics, but these have now been surpassed by *SID 2*.

***SID 2* sets new standards by which other tools will be judged, and it will be some time before it will be bettered.**

IN BRIEF

Type	Shareware
Author	Timm Martin
Requirements	512K
Registration fee:	$25 (£15)

Available from
Start Computer Systems,
20 Holmside, Sunderland SR1 3JE
☎ 091 5652506

AMIGA 95%

Fast Cat

This is an interesting little program, which is typical of the type of off-beat software you can sometimes find in the public domain. *Fast Cat* enables you to connect two Amigas together and communicate between them. While this isn't particularly impressive in itself – after all, any terminal program can achieve the same thing – the program lets you to do a couple of interesting things.

A null modem cable is one that connects to the serial ports of both machines and enables them to communicate at fast speeds, much faster than you'd get if, say, you were connected to a bulletin board system. They aren't a common peripheral to have, but some commercial games such as *Populous* and *Stunt Car Racer* use them for two-player games.

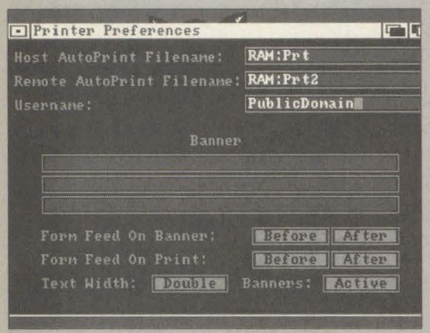
On to the program itself. *Fast Cat* provides several functions, including background printing, which enables you to print out files while still using the Amiga for other things. This option only works if you can name the file that is to be printed, so that *Fast Cat* can take over the printing process, and the Amiga's multi-tasking ability lets you run other programs at the same time. While the printing is directed from one Amiga, the other is used to store and print the file, leaving the first Amiga free to carry on with its duties.

It's also possible to send messages between the two machines, creating a primitive but usable form of network system. You can send commands from one computer to the other, making it possible to execute a program remotely, for example, but you wouldn't be able to see the results of your actions on your own screen. There are preferences you can select to prevent someone using the other Amiga from activating programs on yours if you don't want them to access your machine.

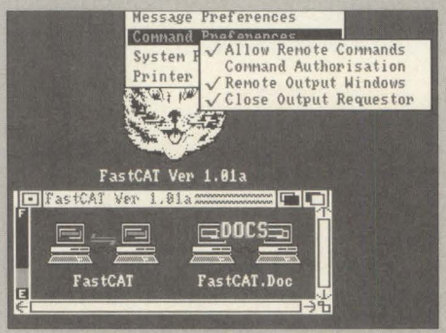
Other options include facilities for transferring files between the two machines, but this could be accomplished easily using virtually any avaialble terminal program.

Paying the the higher £10 registration fee entitles you to a printed manual and binder. This is a practical amount to ask for, as it's not too much compared to the registration fees of other programs. As it is so specialised, the manual could tempt more people into registering.

Fast Cat is one of those programs that sounds interesting in theory, but is not so useful in practice. Few people would have two Amigas, but if you are in such a position then *Fast Cat* may be of interest. And even if it isn't of practical use, you could be the first on the block with an E-mail network...



Fast Cat has background printing which lets you print and use the computer at the same time



Using pull-down menus, *Fast Cat* can be set up so that it can't be controlled by the other Amiga

IN BRIEF

Type	Shareware
Author	Andrew Ridsdale & Nicholas Dodd
Requirements	Two Amigas • Null modem cable
Registration fee	£5
Available from	George Thompson Services, Cucumber Hall Farm, Cucumber Lane, Essendon, Herts AL9 6JB ☎ 0707 664654

AMIGA 69%

ST Sound Lab

Computer music is created using two main techniques; digitised samples which have been 'recorded' from real instruments and chip sounds which make direct use of the computer's built-in sound chip. Samples take up a lot of memory, though, while chip-generated sounds take up far less room, and can often imitate their real-life sampled counterparts. It's these synthesised sounds that *ST Sound Lab* has been designed to let you create.

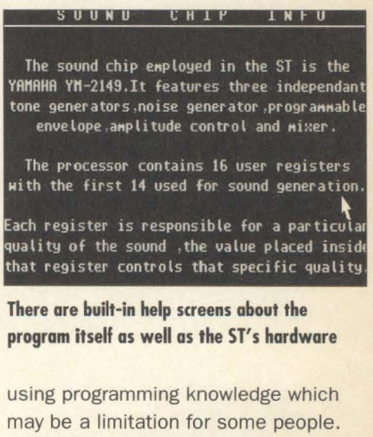
Chip sounds are made up of several different parts, harking back to the original days of music on the 8-bit computers. These sounds take into consideration such aspects as the amplitude of the sound wave, its velocity, its envelope and its volume. When these factors are changed a different type of sound results.

The sound editing takes place on a single editing screen where all the program's functions are accessed. Most functions use numerical values, and both mouse buttons are used to increase and decrease these values, making editing straightforward. Each sound channel has sliders for tone, noise and volume. When these are changed the numeric values are automatically altered, and visa versa.

While editing is easy enough, the tricky bit is actually remembering what each value does to the sound. The only way of learning is through trial and error. No matter how complex a manual this program could have, words can't describe sounds more clearly than your hearing.

Once you've created your sounds it's possible to use them into your programs; however, this requires programming knowledge. Unlike, for example, the soundtracker programs that are available, *ST Sound Lab* doesn't produce standard sounds or modules that you can import directly into your programs. You'll have to do that yourself, using some of the routines that the programmer has supplied with the program, plus routines that you'll have to develop using programming knowledge which may be a limitation for some people.

If you're not familiar with the type of terms used in the program then you may not be able to use the *ST Sound Lab* to the full. Even if this is the case, though, it can still be fun playing with the program, and you're bound to learn a bit about sound chip technology.


SOUND CHIP INFO
The sound chip employed in the ST is the YAMAHA YM-2149.It features three independant tone generators,noise generator,programmable envelope,amplitude control and mixer.
The processor contains 16 user registers with the first 14 used for sound generation.
Each register is responsible for a particular quality of the sound ,the value placed inside that register controls that specific quality.

There are built-in help screens about the program itself as well as the ST's hardware

IN BRIEF

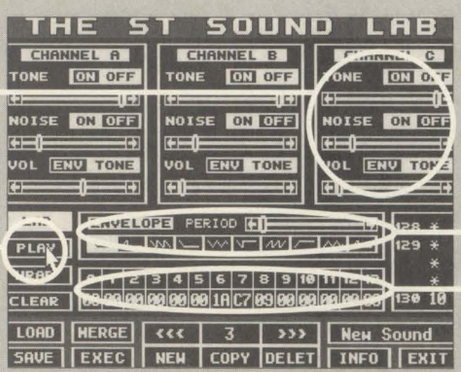
Type	PD
Author	Chris Skellern
Requirements	512K
Disk number	PRO3
Available from	PDST, 95 Elton Road, Sandbach, Cheshire CW11 9NF ☎ 0270 762520

ST 82%

Visit the ST's sound chip laboratory

Using slider sontrols the tone, noise and volume levels can be set up for each channel

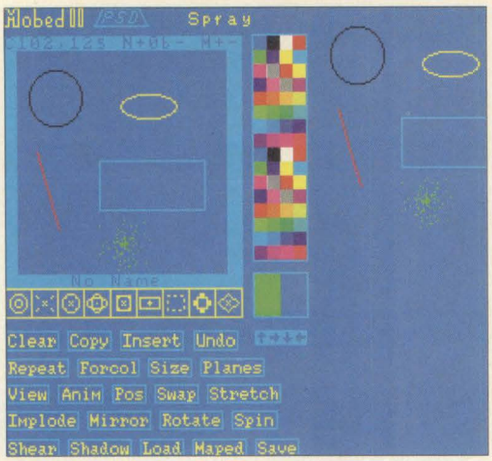
All of *ST Sound Lab*'s functions are controlled using buttons – click on play to hear them



ST Sound Lab can use many different waveforms to create some amazing sounds

By changing these values, the sounds you create can be customised byte by byte...

YOU KNOW THE COMPUTER YOU'VE ALWAYS DREAMT ABOUT?



While it's a sprite package, *Mobed II* includes a number of tools familiar from art packages such as Draw Circle and Box

Do you design your own Amiga games? Then here's a handy utility that'll make sure they're all sprite on the night...

Mobed II

Games without sprites would be like *Cagney and Lacey* without Lacey – possible, but pretty pointless. There are a number of programs designed to help create these essential ingredients (the sprites, that is, not replacement Laceys) and *Mobed II* is one of them.

Mobed II, or Moveable OBject EDitor, has recently been released and is a perfect example of how good a PD program – and it *is* true PD – can be, both in terms of its presentation and functionality. The earlier version of the program was released as shareware, but because of a lack of response from users the program has now been released as PD; a sad sign that a lot of people still aren't prepared to pay money for decent software even if it only costs a few quid.

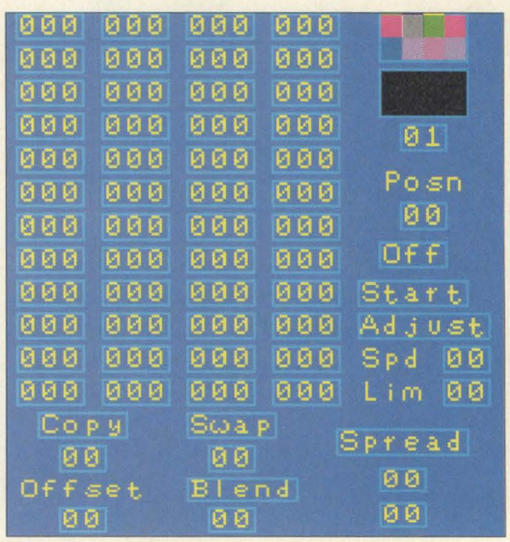
All *Mobed*'s functions are controlled from a main editing screen which takes up most of the space on-screen. It contains all the icons used in the program, which you click on to access the functions. The program is controlled mainly through the mouse, with keyboard shortcuts available for most functions.

Creating and editing a sprite is as simple as clicking on a colour and drawing it in the main editing area. Your range of colours is limited only by the bitmap mode you choose on booting the program. It is also possible to adjust the shades, or even to have colour cycling.

You can create up to 255 sprites, or mobs as *Mobed II* calls them. This number depends on the size of the sprites you're going to have, and the number of bitplanes you're using.

There are a number of manipulation commands familiar from other graphics packages, such as mirror and rotate, but there are a couple of others worth mentioning. The Implode command shrinks and expands the sprites, so you could have (and this is what the author recommends) an explosion which builds gradually from almost nothing to the normal sprite size, creating a smooth animation effect.

When it comes to drawing the actual sprites, there are also a number of useful commands available, again similar to those found on many art packages. It is possible to draw images pixel by pixel or using lines, circles, ellipses, squares, rectangles. There is also a Spray Can tool for creating irregular effects, as well as cut and paste commands to make easy work of editing and creating subsequent sprites for use in animated sequences (check out the accompanying box).



The colour palette that *Mobed II* uses can be changed relatively easily. One good feature is that you can spread the colour values to graduate the shades of several colours

Once you've drawn the sprites you want to use, you can save them in several different formats. They can be saved as Mobed files (which can only be used by *Mobed II*) or as raw/binary and sprite data for you to incorporate into your own programs.

While there are many points in the program's favour, there are also a few drawbacks. One of them is you can't change the size of the drawing tool, so every line you draw is only one pixel wide; to create any large objects takes quite a while. Along the same lines (slight pun intended) is the omission of a Fill command – you have to colour in objects pixel by pixel; the line and spray commands can help to fill in objects more quickly, but with curved or fiddly shapes you have to work slowly and carefully.

Mobed II has an annoying habit of crashing whenever you try to save a sprite to a disk when the program disk isn't in the drive. This is a rather strange fault as most self-contained programs have their file functions built-in; it appears that *Mobed* tries to look for the Save function on its disk before you can carry out the task.

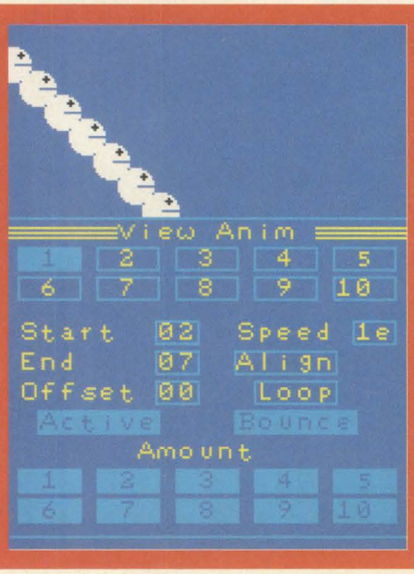
The program comes with good documentation, including a tutorial file that does a very good job of explaining a number of the program's functions methodically, step-by-step. Far too many document files are confusing, dull and leave far too much to guesswork, so it's refreshing to find the inclusion of a file that painlessly teaches you how to use the program.

All in all *Mobed II* is one of the best specialised sprite designers available for the Amiga. There are a few niggly faults, however, which hinder the results you can produce, and these make the program a good one rather than a great one.

Moving pictures

One of the program's major functions is its ability to animate the sprites you create. The process is based on a 'flip-pad' idea where you draw a series of slightly different images on each page of a pad. When you flip through the pages the image appears to move.

In *Mobed II*, once you have defined a sprite, you can copy the information and paste it on to another free 'page'. Then you edit the data to produce a new sprite that is slightly different from the original. You can do this a number of times, then string the all the various sprites together to create the effect of animation.

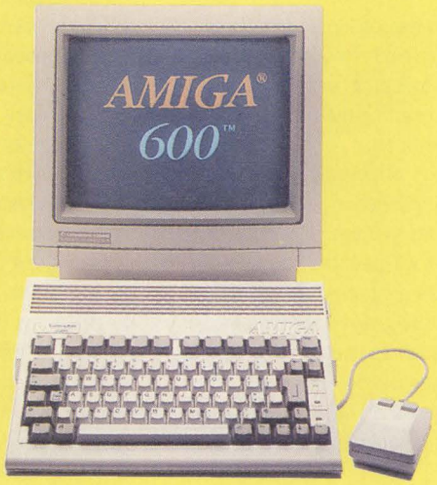


IN BRIEF

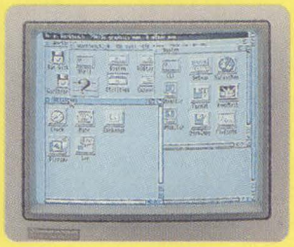
Type	PD
Author	Martin Jones
Requirements	512K
Disk number	MCU86
Available from	MCPD, 6 Colchester Road, Prittlewell, Southend-on-Sea, Essex SS2 6HP ☎ 0702 351941

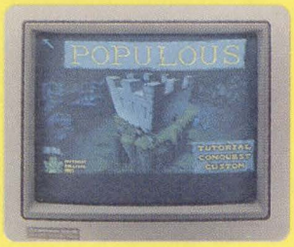
AMIGA 76%

WELL, STOP DREAMING



THE NEW AMIGA 600 HAS ARRIVED





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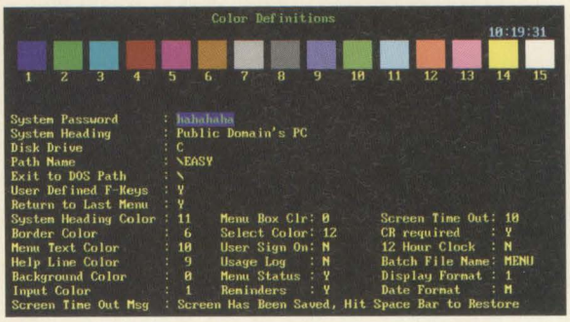
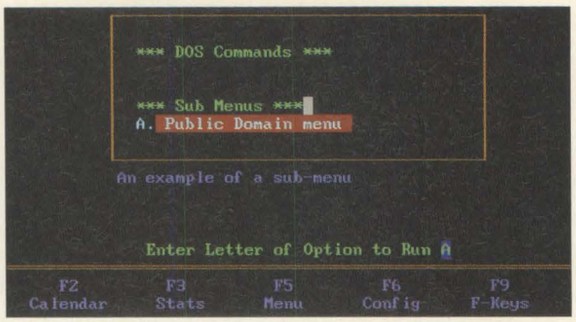

Color Definitions
10:19:31
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
System Password : hahahaha
System Heading : Public Domain's PC
Disk Drive : C
Path Name : \EASY
Exit to DOS Path : \
User Defined F-Keys : Y
Return to Last Menu : Y
System Heading Color : 11 Menu Box Clr: 0 Screen Time Out: 10
Border Color : 6 Select Color: 12 CR required : Y
Menu Text Color : 10 User Sign On: N 12 Hour Clock : N
Help Line Color : 9 Usage Log : N Batch File Name: MENU
Background Color : 0 Menu Status : Y Display Format : 1
Input Color : 1 Reminders : Y Date Format : M
Screen Time Out Msg : Screen Has Been Saved, Hit Space Bar to Restore

***Easy Access* enables you to change many aspects of your menus ranging from the colours of the boxes and the text to the format of the date**



Once set up, *Easy Access* can have up to 26 options in each menu, each of which can theoretically contain unlimited sub-options

Easy Access

PC

Most DOS front ends for the PC enable you to perform both common disk and file operations as well as run other programs, usually via some form of directory tree. *Easy Access*, however, is a bit more specialised as it is strictly concerned with running programs from customised menus.

A menu system like this is almost a compromise between the keyboard inputted commands of the DOS command line and the WIMP systems offered by GUIs (Graphical User Interfaces) and some front ends. *Easy Access* can handle inputs from both the keyboard and a mouse, but the majority of inputting, particularly when it comes to setting the program up, is from the keyboard.

Set-up is achieved from several different configuration screens. The main one lets you set up the colours your menus will use; the paths to the *Easy Access* programs; and whether you want to be able to access certain features, such as user-defined function keys and passwords. Other configuration screens enable you to define the commands for the function keys and enable you to access some of the program's other functions such as its built-in calculator and calendar.

You can have up to 26 options in each menu, and an unlimited number (supposedly) in the sub-menus. It's a simple matter to edit these menus to gain an understanding of what they're all about and then create your own from scratch.

A menu is made up from several different elements. Headings are the strings of text that describe what the menu is all about while Programs are the programs that the menu lets you run from it. When editing these menus you have to designate which line is a heading and which is for running a program. When you edit a Program string, you have to set the name of the program, its path and any command parameters. The program doesn't give you a directory to see where files are on the disk; you have to remember what the paths and parameters are.

The program has been designed for PCs with hard disks, although it can run from floppies. However, because floppy disks are limited in terms of capacity and speed, a menuing system such as this would be pointless; you'd be able to locate and run the program just as quickly using normal methods, ie, using the command line and looking through directories.

While *Easy Access* requires a bit of setting up, this isn't difficult to do and afterwards your PC should be much more accessible.

IN BRIEF

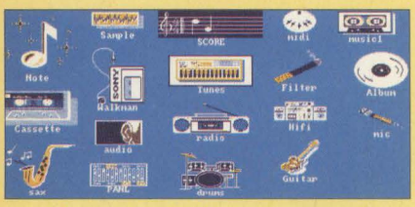
Type	Shareware
Author	Tengware Enterprises
Requirements	256K • CGA • Hard disk preferable
Disk number	1023
Registration fee	$25 (£15)

Available from
Nildram Software, 26 Stanley Hill Avenue, Amersham, Buckinghamshire HP7 9BD ☎ 0494 432342

PC 71%

Icons Galore

AMIGA



If you need an icon for a music program, *Icons Galore* should be able to help you out

This compilation must rate as one of the most comprehensive collections of icons ever. Not only are there several tools which can be used to create custom icons and attach them to files, there are dozens of pre-prepared icons on the disk as well.

The six icon-related programs on the disk range from a simplistic drawing tool for drawing icons (although you'd probably be better off using a real art package) to utilities to turn the images into icons.

There are 231 icons on the disk, purloined from other icon and PD disks, along with a few that Gary Henderson has created himself. Icons of a similar type have been sorted into drawers so that you can find them easily.

Workbench 2.0 owners may find that some of the icons look strange on-screen. Many have been created for use under 1.3 and their colour and size may look unusual viewed under the new operating system.

Icons Galore is a mixed bag. The icon-related programs are a bit simplistic, but remain some of the best of their kind available. The quality of the icon images varies, but there's at least there's a decent variety on offer. The thing is: are icons covered by copyright laws?

IN BRIEF

Type	PD
Author	Various
Requirements	512K
Disk number	MCU87

Available from
MCPD, 6 Colchester Road, Prittlewell, Southend-on-Sea, Essex SS2 6HP ☎ 0702 351941

AMIGA 64%

Program Grabber

ST

One of the most convenient aspects of the ST is its ability to have desktop accessory, or DA, programs that can be executed simply by selecting them from a menu on the main desktop.

The AMAZING Program Grabber v1.00
Public Domain! Spandefang Software 1991
1 First Prg : DIR .TTP
2 Second Prg : ASCII .TOS
3 Third Prg : THIRD .PRG
4 Fourth Prg : FOURTH .PRG
GRAB 'EM
FLUSH
FORGET !!!

From this menu you can select which of the programs *Program Grabber* has grabbed that you want to run

But while there are many DAs available in the public domain, they understandably can't do everything; there are dozens of other programs that would be handy to have as DAs but aren't. There may be a way out, though, in the form of *Program Grabber*.

Program Grabber is itself a DA, but it's capable of reading executable files into memory and leaving them so they can be called up easily, effectively turning those programs into DAs. The program can be run as soon as you get the disk as there are two small programs set-up to load from it: a directory listing program and a tool that gives you an ASCII table list. Both of these are small TOS files and appear on-screen shortly after being requested from the *Program Grabber* DA.

There are some limitations to the program. It won't work with programs that execute other programs, or ones that use resource files. And ultimately you are limited by the amount of memory you have. *Program Grabber* is a good idea, though, and if you need such a program then give it a go.

IN BRIEF

Type	PD
Author	Spandefang Software
Requirements	512K
Disk number	UTL 3023

Available from
Floppyshop ST, 45 Provst Graham Avenue, Hazelhead, Aberdeen AB1 8HB ☎ 0224 312756

ST 61%

The best of the rest • The best of the rest • The best of the rest

It's poptastic, and, indeed, fantabulous, prog-pickers. There's more movement on the charts this month than in the bowels of someone who's just had a triple-decker prune and baked bean sandwich, and a new number one Amiga program to boot. It's hot. It's happening. Check it out!

PC

❶ LHA Utilities 2.12 — Issue 2 — 95%

Software Services Shareware, 25 Maywood, Brynna CF7 9PZ

Archiving and dearchiving files has never been easier with this collection of powerful tools, guaranteed to compact large numbers of files into a much smaller single file.

❷ Flexibak Plus 2.0 — Issue 7 — 90%

Nildram Software, 26 Stanley Hill, Amersham, Buckinghamshire HP7 9BD

Backing up your hard disk is an essential operation, but a dull and lengthy one. This latest version of excellent *Flexibak* takes the pain out of the process.

❸ Graphic Workshop 2.56 — Issue 6 — 89%

PC Independent User Group, 87 High Street, Tonbridge, Kent ☎ 0732 771512

Not just useful for converting a wide range of graphics formats this program also enables you to manipulate images in a variety of weird and wonderful ways.

❹ Shareware Selection — Issue 1 — 88%

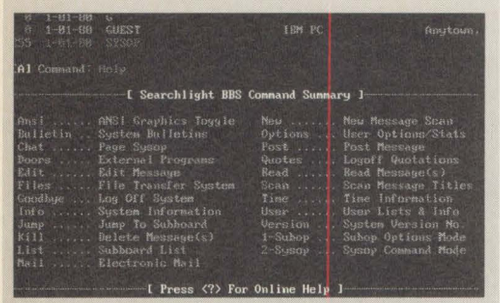
Benetech Systems, 21 Loughborough Road, Leicester ☎ 0533 611231

23 disks containing a variety of programs, including a number of utilities that handle such things as disk copying, a keyboard accelerator plus a few other goodies.

❺ Searchlight — Issue 2 — 88%

Fantasia Shareware, PO Box 1231, Clutton, Bristol ☎ 0761 453716

One of the best bulletin board system (BBS) packages available anywhere, and this cut-down trial version is available as shareware!



A clear layout makes *Searchlight* a pleasure to use

❻ Winbatch — Issue 1 — 85%

Omicron Systems Ltd, 45 Blenheim Crescent, Leigh-on-Sea, Essex

A handy utility that enables you to write your own batch files to control Microsoft Windows by using a powerful batch file control language.

❼ ASM 14 & CPU 24 — Issue 1 — 85%

Fantasia Shareware, PO Box 1231, Clutton, Bristol ☎ 0761 453716

Can't find the program you want? Why not write your own? These two programs work together to provide an entry-level introduction to writing PC programs in assembly. You write the programs using *ASM 14* and then run them within *CPU 24*.

❽ Quick Titles — Issue 6 — 84%

Testware, 46 The Avenue, Harrogate, North Yorks ☎ 0423 880471

Want to design you own welcome screen? Or perhaps a message to insert into one of your programs. *Quick Titles* is the easy way to write text in massive fonts.

❾ Scout — Issue 4 — 84%

Public Domain and Shareware Library, Winscombe House, Beacon Road, Crowborough, Sussex TN6 1UL ☎ 0892 663298

A compilation packed with TSR (Terminate and Stay Resident programs) that can be recalled at the press of a key. Everything from disk formatting to executing programs.

❿ Rock Utilities — Issue 6 — 83%

PDSL Winscombe House, Beacon Road, Crowborough ☎ 0892 663298

31 utilities crammed on to two disks, most concerned with updating or extending standard DOS commands to make them either easier or more powerful.

ST

❶ GFA Basic 2 — Issue 1 — 95%

Riverdene PDL, 30a School Road, Tilehurst, Reading ☎ 0734 452416

Once commercially available, this is a fully working version of the GFA Basic programming language, one of the best versions of BASIC available for the ST.

❷ Empire Soundtracker — Issue 1 — 91%

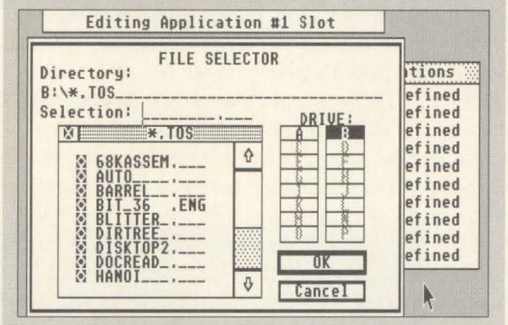
Riverdene PDL, 30a School Road, Tilehurst, Reading ☎ 0734 452416

Now you can create music along the lines of the tunes found in games and demos – *Empire Soundtracker* enables you to sequence four channels of samples to make the music, even in stereo if you're lucky enough to have an STE.

❸ VDOS ProQueue — Issue 7 — 88%

ST Club, 9 Sutton Place, 49 Stoney Street, Nottingham ☎ 0602 410241

A superior desktop replacement providing over 50 disk and file utilities and featuring user-definable menus which let you to run 101 programs at the click of a mouse button.



Run any of 101 programs at a mouse click with *VDOS ProQueue*

❹ Hitchhiker's Utilities Disk — Issue 4 — 86%

Office PD Choice, Suite 14, Avon House, Town Centre, Cumbernauld G67 1EJ

A compilation of utilities which do everything from custom disk formatting to disk cataloguing and lots more besides. Very powerful and well worth a look.

❺ DosAcc 2.8 — Issue 7 — 85%

ST Club, 9 Sutton Place, 49 Stoney Street, Nottingham ☎ 0602 410241

Possibly the ultimate collection of desktop accessories, *DosAcc* features dozens of handy file- and system-related utilities that can be called up from the desktop menu.

❻ The Duplicator — Issue 4 — 85%

Softcell Services Shareware, 25 Maywood, Brynna, Pontyclun, CF7 9PZ ☎ 0443 238630

A copying program that copies complete disks in one go as opposed to file-by-file. A couple of handy extra features puts this piece of software ahead of the pack.

❼ Gemini — Issue 2 — 85%

Arrow PD, 6 Kents Orchard, Perry Street, South Chard, Somerset TA20 2QB

One of the most powerful and attractive desktops for the ST that replaces the normal GEM operating system display and makes the computer more friendly to use.

❽ Elf-Boot — Issue 6 — 84%

ST Club, 2 Broadway, Nottingham NG1 1PS ☎ 0602 410241

Customise your ST so that it boots-up just the way that you want it to.

❾ Video Master — Issue 5 — 84%

South West Software, PO Box 562, Wimborne, Dorset BH21 2YD

Use this Budgie program to create your own video titles using simple Amiga text files, re-sizing them to create special effects.

❿ Runner — Issue 6 — 83%

ST Club, 2 Broadway, Nottingham NG1 1PS ☎ 0602 410241

This program adds menus to your ST desktop so that instead of looking at that familiar lime green screen, you have a picture plus a menu selector.

Amiga

❶ NComm 2.0 — Issue 7 — 93%

Vally PD, PO Box 15, Peterlee, Co Durham SR8 1NZ ☎ 091 587 1195

The latest update of a superb comms package is shareware, but the registration fee is worth the money. New features include a faster script language, ARexx interfacing, a diary and transfer bars to show you how your downloading is going.

❷ MessySID — Issue 3 — 93%

Strictly PD, 11 York Place, Bristol BS1 5UT

A combination of *SID* and *MessyDOS*, this essential tool not only enables you to transfer files to and from Amiga disks, but to PC disks as well.

❸ SID 1.6 — Issue 1 — 92%

George Thompson Services Ltd, Cucumber Hall Farm, Cucumber Lane, Essendon, Herts AL9 6JB ☎ 0707 664654

Of all the utilities available for the Amiga, *SID* is an essential program to have, as it makes all file operations quick and easy to perform.

❹ Super C — Issue 2 — 88%

Essex Computer Systems, Freepost, Basildon, Essex SS16 4BR

CLI utilities galore are to be found on this disk. A large number of tools that do things like displaying IFF images, checking for viruses and speeding up the mouse pointer.

❺ Term 2.0a — Issue 7 — 87%

George Thompson Services, Cucumber Hall Farm, Cucumber Lane, Essendon, Herts AL9 6JB ☎ 0707 664654

A comms program especially written for Workbench 2.0 owners, and darned good it is, too.

❻ ImageLab — Issue 4 — 87%

Ed Lib, Scotland Farm,Stockwood Road, Brislington, Bristol

If you've created a picture in a paint package and it's not quite right then *ImageLab* is a powerful editing tool that enables you to make the alterations you want.

❼ Windows Bench — Issue 3 — 86%

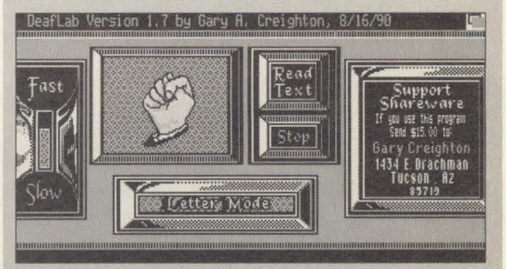
NBS, 1 Chain Lane, Newport, Isle of Wight PO30 5QA ☎ 0983 529594

Not a total replacement for the Amiga's Workbench display, this disk makes it look like Windows on the PC, as well as providing a number of crucial utilities, including *SID*.

❽ DeafLab — Issue 2 — 85%

George Thompson Services Ltd, Cucumber Hall Farm, Cucumber Lane, Essendon, Herts AL9 6JB ☎ 0707 664654

A program for the deaf or hard of hearing, this program enables you to convert text messages to sign language, and very good it is, too.



***DeafLab* is a great way to learn the basics of sign language**

❾ Radbench — Issue 7 — 84%

17-Bit Software, 2/8 Market Street, Wakefield WF1 1DH ☎ 0924 366982

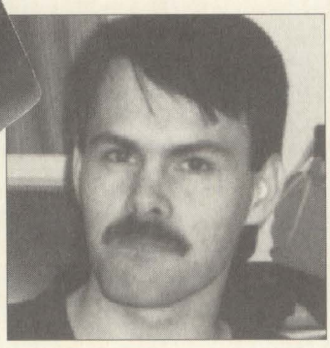
Copies the standard AmigaDOS commands and libraries from disk to the device RAD: with the results that all the commands are speeded up considerably.

❿ VideoLab — Issue 6 — 84%

Déjà Vu, 25 Park Road, Wigan, Lancs WN6 7AA ☎ 0942 495261

If you make your own home movies on video, or just want to add a few titles to the recording of your cat giving birth, this program produces smart results and is easy to use.

On-line action



Don't loiter on-line – just grab your messages and run! How? By using an off-line reader to pack all your mail into one downloadable file. Peter Wright explains how they work, where to get them and what features to look out for...

Popular reading

Some of the most popular mail readers among Amiga, ST and PC owners are:

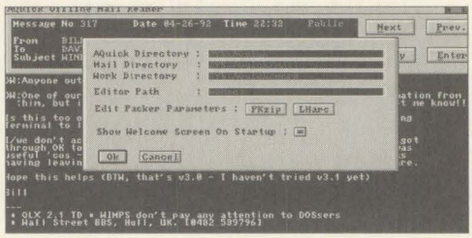
- **AMIGAXRS** Practically the only XRS reader available on the Amiga
- **AQUICK** Rapid and visually excellent Amiga QWK reader
- **MICROTALK** The standard among ST mail readers
- **POWERQWK** Incredibly powerful PC QWK reader
- **XRS** The original PC XRS reader, now handles QWK as well

Off-line mail readers are usually located in either their own special file area on bulletin boards or under the heading of COMMS. All you have to do is download them.

After last month's look at international mail networks I bet you're dying to log on to a conference. You know, one of those areas where comms users can log on and get in touch with other users the world over to discuss every topic under the sun, from the latest custom chips to Grand Prix results. However, as anyone who has used them will tell you, they do have one fairly big down point: the number of messages added to the various conferences over an average week is phenomenal and reading them while you are logged on to a board can cost a lot of cash.

An alternative to running up the phone bill reading mail on-line is to use a board's mail packer and an off-line mail reader. The mail packer can be configured to recognise which areas of mail on the bulletin board are most of interest to you. It can then find any new messages in those particular areas, pack them together into a single file and allow you to download them for reading, off-line, at your leisure. Off-line readers, or OLRs as they are known, are by no means a new concept but their use has only really become vogue over the past 18 months or so.

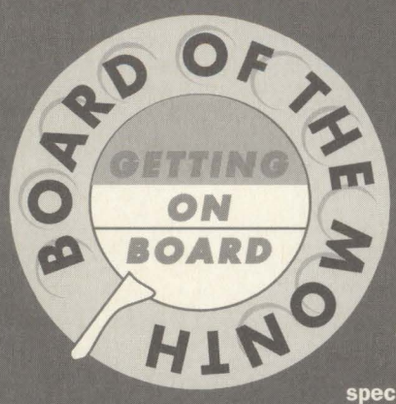
There is a plethora of OLRs available for all the popular machines so I won't even think about going into any great depth on any in particular. However, there are only really two popular formats for the actual mail packets, and it is the format of the mail you receive that determines which programs you can use.



***Aquick* is an off-line mail reader that makes heavy use of the Workbench 2.0 look, on all versions of the Amiga**

Mail formats

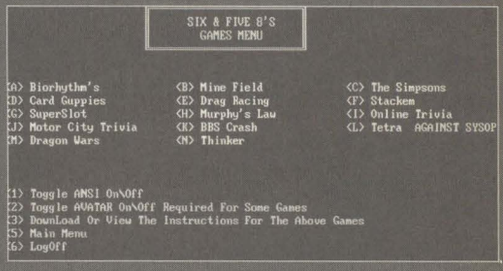
By far the most popular mail packet format is the QWK (pronounced Quick) format. QWK mail packers (the board's part of the software) are extremely common and can be found for bolting on to almost any of the popular bulletin board programs available today. in fact Mustang, the company responsible for distributing the PC *Wildcat BBS* software, now distributes its software with a QWK mail packer built in. One major failing of QWK mail, however, is the speed at which it works. Picture a mail packet of about 800 messages. QWK provides no method for allowing a program to jump directly to any particular message and so it is up to the OLR to sort the messages in the packet into some kind



Six n Five 8s

Each month I will be taking a detailed look at a bulletin board that has grabbed my attention, especially boards with a particular theme or special point of interest. To kick off the series Brighton-based board Six n Five 8s gets the treatment. This two-line board has tons of software to download, and a multi-player adventure. What more could you ask for?

Six n Five 8s is one of a growing band of bulletin boards that actually has a CD-ROM system on-line for callers to use. In the case of Six n Five 8s this is constantly running the Micro Haus Shareware Library disk providing access to 650Mb of compressed PD and shareware programs, although these are all PC only. A major advantage of a board like this from a user's point of view is that it is not desperate for them to upload new files. As such, users have an unlimited number of downloads available to them which makes for an extremely easy-going atmosphere on the board itself.



Six n Five 8s has a number of games on-line, although the bias is towards gambling. It's only pretend money though!

Access to the CD-ROM is the same as accessing files on a normal board's hard disk. Simply select the File option from the main menu, and then select the CD-ROM file section rather than the hard disk file section. The sysop, Ralph Davey, provides file lists on-line which users can download and browse through at their leisure. The file list for the CD-ROM section is 900K long, although it is available either compressed or as a straight ASCII file.

Files alone do not make for a good board and so Six n Five 8s is also a member of the huge Fidonet network (covered in detail last month). This means that users of practically any popular machine, including the three

of order, and with a big packet this can take a long time, even on a powerful machine.

The alternative is the XRS (eXpress Response System) format. XRS has been around as long as QWK but is not quite as widespread, and is usually found on FidoNet boards running on PCs. It is a lot faster to deal with than QWK since the mail packer on the board builds the index tables necessary for the OLR to pin-point an individual message. Many XRS packers also provide a facility for something called a User Request. This is where the user addresses a message to XRS itself requesting files. These are then sent to the user's computer the next time he or she logs on along with the new mail packet, thus saving an incredible amount of time on-line hunting through the board's user menus.

Program features

OK, so you know what format your mail is going to come to you in, and you've found out which programs you are able to use, but what features should you look for? Obviously your reader should allow you to both read and reply to downloaded messages. If you are using a FidoNet board, however, and want to send private mail to someone on another board then you need to check that the OLR will allow you to enter network addresses along with the messages since this is the only way of guaranteeing that your message gets to the right person, and the right person only. This feature is more commonly found in XRS readers, since XRS was designed with Fido in mind.

A common practice of many OLRs is to allow the user to quote part, or all of a message back to the person who originally wrote it, along with some comments of your own. This is particularly useful when replying to old or obscure messages. There's nothing more annoying than receiving a message that says nothing more than "Yes"!

Large boards and large networks mean lots of users, not all of whom you will get on with. Many OLRs provide the facility to filter out mail from certain individuals, much nicer than wasting time getting involved in needle matches and petty arguments with certain other users.

If you regularly get involved in discussions that you wish to keep a record of then the ability to archive selected messages is extremely useful. Archiving simply involves storing the messages in a plain text file for later reference if necessary.

There are still a great number of boards, however, that do not provide facilities for off-line mail reading. All is not lost. All good comms programs provide a Capture facility. This can be used to 'grab' any mail relevant to you to be read later off-line using nothing more than a simple text editor. Replying to the mail is also fairly straightforward. Most boards have a set sequence of commands that must be entered by the user in order to upload a message. All you have to do is build up a text file of replies in your text editor then enter the at the start of each message the series of commands (cut and paste facilities come in handy here). Log on and send the reply file; if you've got it right everything will be done automatically.

Off-line mail readers provide you with much greater freedom in reading and replying to messages on a board. It won't long before it's the message areas that become your main interest when you're on-line, as opposed to the file areas. Soon it will become clear that there is much more to comms than just getting software. PD

Available Groups
000 LOCAL 12 Messages
019 00019: GENESIS 3 Messages
026 00026: TN_Amiga 4 Messages
029 00029: TN_CProgrm 8 Messages
031 00031: TN_Program 1 Message
034 00034: TN_Comms 65 Messages
035 00035: TN_BBSAds 43 Messages
063 00063: WN_Sharwre 28 Messages
071 00071: WN_Comms 28 Messages
073 00073: WN_Program 21 Messages
089 00089: XN_Jokes 6 Messages
090 00090: S_BadUseCh 3 Messages
091 00091: S_BadUser 200 Messages
092 00092: WN_Amiga 3 Messages

Off-line readers can help sort your mail by grouping similar messages together into conferences

Multi-line boards – meet more users

Having more than one line into a board is fast becoming a popular trend. As well as Six n Five 8s, 01 For Amiga (where *Public Domain* has its own area) is a multi-line board allowing five users access at the same time. An obvious advantage of this kind of board is that users can hold real-time conferences; these are discussions where each user can see what the others are typing, as they type it. Until very recently this was a facility that could only be offered by expensive commercial systems such as Prestel and CIX.

There are a couple of down points to this system. The first is cost. Setting up a multi-line system costs sysops a lot of money which is usually recouped by making users subscribe to the board. Also, if the board is running on a single computer then operations are slowed down considerably. This makes for jerky screen updates and slow response. Most sysops realise this, however, and use either fast computers or more than one.

Off-line comms

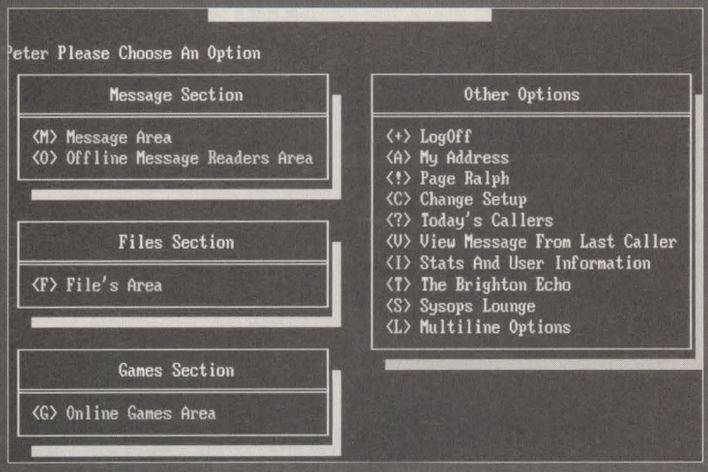
Off-line mail is not the only area in which the comms user can perform functions off-line. Many commercial systems, in particular the American Compuserve conferencing service, provide programs which enable complete access to areas of the system from an off-line program. These systems allow the users to make requests for files, as well as mail and other information, from within a custom program. These requests are sent to the on-line system when the user is ready. Since it is the program and not the user which accesses the board mistakes are cut down, and so, consequently, are the phone bills.

covered by this magazine, are well catered for in terms of message areas ranging from machine specific programming sections to conferences on tropical fish and Grand Prix racing.

On-line games are available for the user who wants a little light relief, including a multi-player adventure, which at the moment caters for two concurrent users. The rest of the games are primarily gambling-based and to be fair some are best appreciated with a fast modem owing to the amount of screen updating that goes on. However, one game that stands out and has me well and truly hooked is *Dragon Wars*. This is a play-by-mailbox game in which each board user controls a fantasy-style army roaming around a Tolkienesque world attempting to conquer other users, or form alliances, and eventually achieve the status of Dragon Lord. Each player can post only one move per day on to the board. This may sound like an ideal ingredient for mass tedium but does, in fact, serve to make the game a very tense affair with players desperate to find out what has been going on in the game world every day and keen to post their next orders.

The general look and feel of the board itself is very professional. Text is a tricky subject for anyone to make look attractive but Mr. Davey has succeeded throughout the board with clean, colourful menus and information screens. The recent addition of a second linked system (called Six n Five 9s) enhances the professional atmosphere enabling user to user real-time chat as well as easier access during busy periods. The opportunity for PC owners to download as much data for free as their time will allow is sure to make the board a major success with them. For demo fans looking for the latest technorave disks, however, they would be well advised to look elsewhere. But if messaging is their forté then Six n Five 8s is the place to be.

The board can be contacted on ☎ 0273 688888/699999.



Use of colour and text is handled very well within Six n Five 8s

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APD329 Fruit Machine II +

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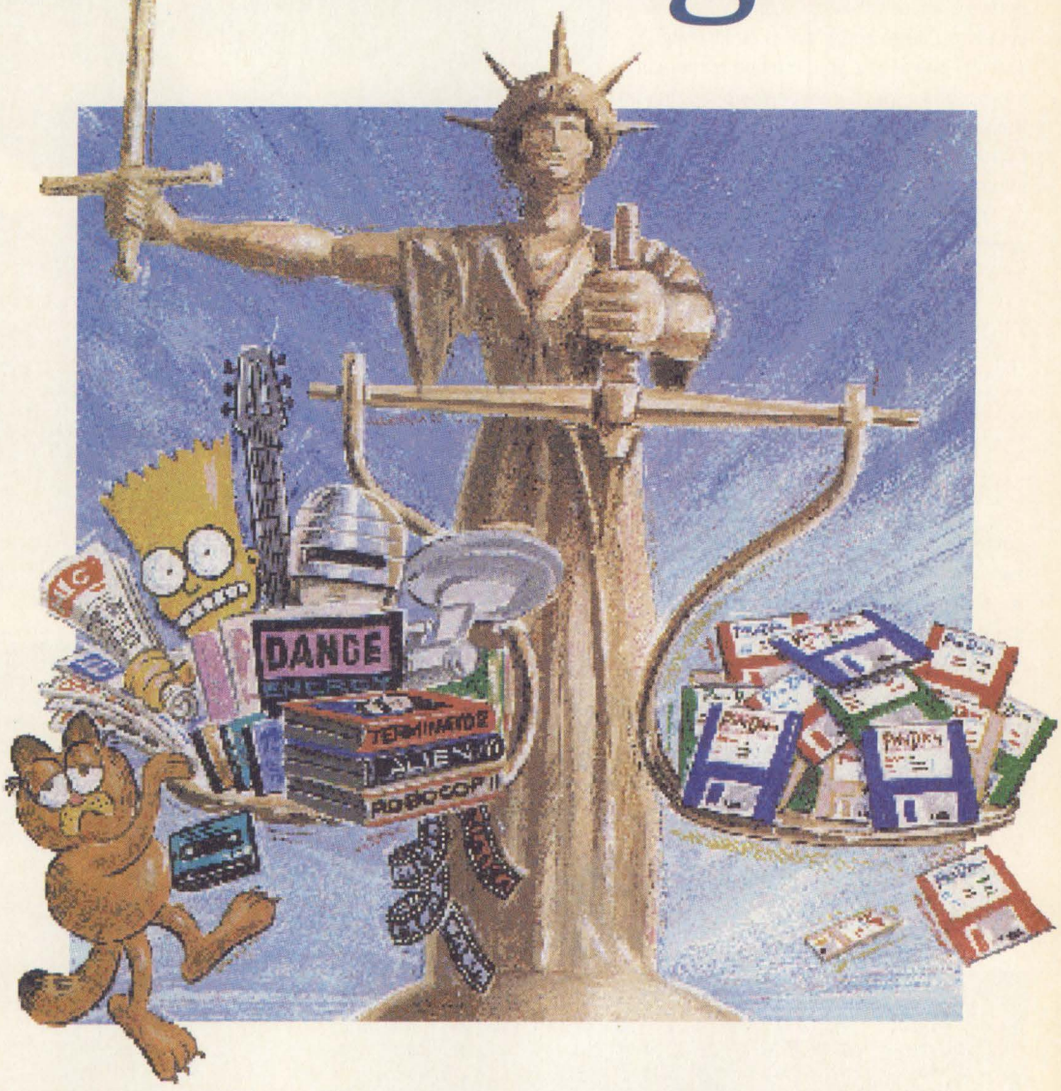
Whose right?

Terminator. The Simpsons. Garfield. The latest rave dance tracks. You can find them all on public domain disks, most commonly in demos and games. In theory no-one makes a profit from PD so pilfering other people's creations can't be wrong, can it? Karl Foster discovers that the public domain is rife with software that flaunts the copyright laws...



Thousands of pounds are reckoned to be lost every year because of it. People can face jail sentences and huge fines if they are caught doing it. And yet everybody, particularly the computer software user, has probably done it and is still doing it, probably without even realising. What is this heinous crime? It's called breach of copyright.

One of the great things about public domain and shareware software is the selflessness behind its creation, the idea that people will apply their expertise to writing a program and give it away either for free or for a minimal amount of money. Then there are the libraries and bulletin boards services (BBSs) which are mostly non-profit making organisations that distribute the software. All jolly hedonistic stuff, but there is a problem.

"PD and shareware authors, while happily coding away into the wee hours just for the fun of it, can easily end up on the wrong end of a civil action."

PD and shareware authors, while happily coding away into the wee hours of the morning just for the fun of it, can easily end up on the wrong end of a civil action for breach of copyright. Libraries and BBSs, cosy in the knowledge that their catalogues are legitimate, can and have committed breaches that could land their proprietors in court.

Data rights

Computer technology has made it so easy to distribute data that we sometimes forget the data may belong to someone else, and that's what

Who has the right to the claim of being the author of a computer program?

The Copyright, Designs and Patents Act 1988 introduced the novelty of extending copyright to 'computer-generated' works – works that have no human author. We're not talking artificial intelligence here; computers cannot write programs by themselves.

The factor that gave rise to this new bit of law is the way that programs are written – trust computers to be awkward. By way of an example, here's a little conundrum. Joe Bloggs has written a shareware program in C using a commercial C compiler licensed to FabSoft. The computer has taken the listing and, via the compiler, has turned it into an object code that it can use – binary code, that is. So the computer wrote the object code and thus owns the copyright, right?

Er, not quite. Computers have no rights under law – oh, for shame – so who owns the object code? According to section 9 (3) of the Act, the first owner of a computer-generated work is, "the person by whom the arrangements necessary for the creation of the work are undertaken". Well, that's Joe in with a claim for sure. But FabSoft's compiler is in there too, in that its compiler supplied some of those 'necessary arrangements'.

It would seem that the copyright is owned by the data provider – can you imagine FabSoft chasing all the users of its compiler for a share of the rights to their programs? And, until there's a test case to say otherwise, that's probably the way things will continue.

It's still a grey area – something not uncommon when it comes to legal matters – and, as copyright expert Christopher Millard stated in a paper titled *Software Copyright in the UK and EC*:

"The only satisfactory way of dealing with situations where there is a possibility of more than one party claiming copyright, is for an agreement as to ownership of any rights to be reached in advance and be evidenced in writing."

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cont. from p25

copyright is all about: the right to copy the intellectual property of someone else. During the latter half of the 1980s overall copyright infringements in the UK increased tenfold in comparison with the first half of the decade. A huge amount of revenue was lost to software houses through organised pirates circulating illegitimate copies and through ordinary people like you, me and numerous businesses copying commercial programs on the sly. Not that the latter means we're all a bunch of pirates; it's just that computers make information an apparently cheap commodity.

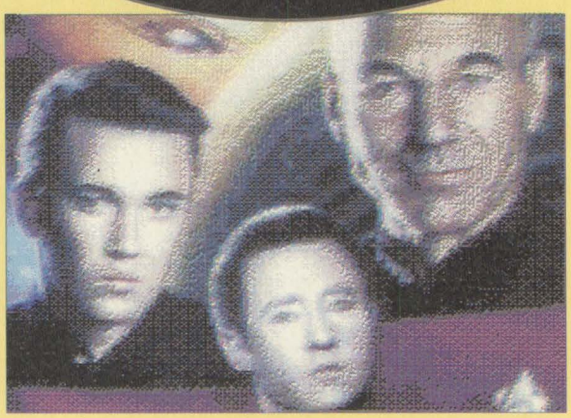
Piracy aside, even programs written specifically as PD can run into trouble; although

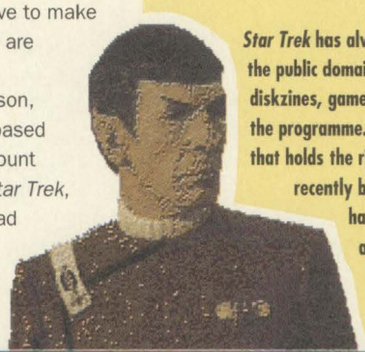
"Anything that involves skill and labour to put together is protected under copyright law as soon as it is created."

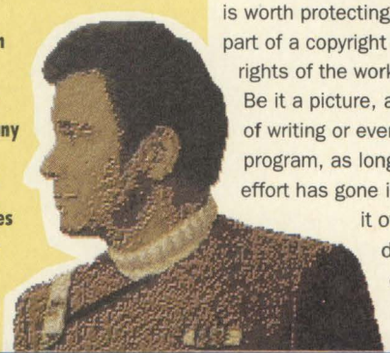
authors waive copyright on their programs, and shareware can be freely copied and assessed before you part with money for it, sometimes the elements that serve to make a demo, an application or a game are somebody else's property.

Take the plight of Nels Anderson, author of the excellent *Star Trek*-based shareware game *EGATrek*. Paramount Pictures, holder of the rights to *Star Trek*, took issue with the fact that he had included references to the popular TV series in his game. And rightly so. Paramount holds the licence to all that is *Star Trek* and was miffed that someone else stood to make money from its property.

Happily, Nels was able to get round the issue by re-programming the game and removing all reference to Klingons, Star Fleet, Enterprise and the like – the new version is known as *EGA Trek* – but it could still have been a sticky moment for him.







***Star Trek* has always been a popular topic in the public domain. You can easily find diskzines, games and slideshows based on the programme. But Paramount, the company that holds the rights to the series, has recently become very precious it and has even contacted PD libraries asking them to remove *Star Trek*-related disks from their catalogues**

Protecting creativity

While it takes a leap of the imagination to grasp that anyone can own something as ephemeral as a TV space adventure, anything that involves skill and labour to put together is protected under copyright law as soon as it is created. Simply put, copyright protects the products of people's skills, labour or time. Yes, the picture you knocked up in *DeluxePaint* last week is as much your property as *Star Trek* is Paramount's. Of course, your rights to such a picture are unlikely to ever be contested before a jury, but what if someone else started using it as a still in a computer game without asking you? It's your work and it's been nicked, so you'd be right to chase the thief.

A judge once said: "Anything worth copying is worth protecting," and that if a substantial part of a copyright work is reproduced, then the rights of the work's owner may be infringed. Be it a picture, a passage of music, a piece of writing or even the code for a computer program, as long as it is original (and work or effort has gone into it) then whoever created it owns it. The term 'substantial' does not even refer to a large chunk of a work. If you were to sample two bars of a

How can software authors protect their work from being ripped off?

While some software authors may unwittingly be ripping off the works of others, many are victims of copyright infringements. American shareware outfit PKWare recently discovered that someone has hacked its archiving utility *PKZip* and is putting out illicit copies under the name *PKZip 2.0*.

So irked is the firm that it is offering a reward to whoever can provide evidence leading to the infringer's conviction – it's likely that the guilty party will face a fine and a jail term if convicted for knowingly ripping off a copyrighted work.

Another stateside author, Diana Gruber of Las Vegas, is taking stiff measures to protect her programs after, she claims, hackers took her *Las Vegas EGA Casino* game and put it out under a different name.

"They broke the program and parts of it won't work," she says. To her dismay, she found that she had no legal basis on which to stand an action for infringement. Now she insists that anyone distributing her programs must abide by a lawyer-drafted licence agreement. "I would encourage other programmers to take up licence agreements, not blanket permission or perpetual rights – it's a mistake to give away your rights," she adds.

Diana Gruber was shocked to find that her program, *Vegas EGA Casino*, had been hacked and put out under a different name

On this side of the Atlantic, Adrian Mardlin, shareware author and publisher (and subject of our Public Eye interview on page 49), is also wary: "I'm fairly liberal in that I don't have extensive licence agreements and I'm rather easy on vendors, but there are a lot of sharks out there. I'd like to put my foot down and say only libraries that follow the rules can carry my software – those that don't are hardly going to be promoting shareware as something you should register, they're more concerned with making a quick buck."

He identified pirates as the ones having the most negative impact on shareware, but says that some reputable dealers should look more closely at their listings: "Take most catalogues apart and you'll find things they shouldn't be carrying."

Unfortunately for such authors, there is no body that has any standing under law with which they can register their works. But there are some measures you can take if you write shareware programs that you want to protect. You must be able to prove it belongs to you and that you wrote it first. To do this, the simplest method is to post it to yourself by recorded delivery and to keep the sealed and dated envelope in a safe place ready for when, and if, it has to be opened in court. Or you could seal it in a package and deposit it with your bank with instructions (given separately) not to open it. And make sure that there's a separate record of the date and time of receipt.

To protect your copyright in countries not a party to the Berne Convention (of 1886) and the Universal Copyright Convention (of 1952) – both intended to ensure that countries offer the same level of copyright protection to foreigners as they do to their own nationals – slap the © symbol, your name and the year in which the work was first published all over it.

Should the PD libraries take more care about checking their software?

The debate still rages as to whether manufacturers should take more trouble to warn PD libraries that pirated copies are in circulation, or whether the libraries should make a greater effort to check their catalogues. What is certain, however, is that if someone infringes copyright and it can be shown that they had no reason to believe the work was subject to copyright, the copyright holder is not entitled to damages for the infringement. The entitlement would only be for any money made as a result of the infringement – an interesting test of the integrity of a non-profit making PD library perhaps – and that all infringing copies be delivered up to the copyright holder.

Incidentally, if it can be shown that the infringement was deliberate and conducted in the course of business, then we're looking at criminal proceedings (the 1988 Act introduced the criminal element to copyright law), a possible unlimited fine, if convicted on indictment, and/or imprisonment for up to two years. Not very nice.

John Dudley of the Public Domain Standards for Distribution (PDSL) reckons that PD libraries should carefully check all their software to make sure that it has not been pirated

So what are the vendors doing to avoid legal action? John Dudley of Essex Computer Systems checks over every title sent in: "I reckon that the first judgement is visual. You can generally tell if something is commercial by looking at it – if it looks particularly good, I'll go further into it."

His library is involved in the Public Domain Standards for Distribution (PDSD), initially set up to combat the distribution of pornography, but it has an in-group forum for discussing software that is suspected to be commercial. A responsible move it seems, but are the rest of the libraries following suit?

"The larger libraries yes. Some of the smaller ones, probably not," says John. "They feel they are immune from all this and don't care if they think they can make a few bob. It's the responsibility of public domain libraries to keep their own houses in order."

This is statement with which Stuart Eyes of Amiga library StarTronics PD concurs: "I go through each disk to make sure it is not copyright – if it is, it doesn't go in." His was one library caught out by the illegal distribution of a commercial program, the *Red Sector Demo Maker*. Thankfully, he read the news report in issue five of *Public Domain* and immediately removed the program, which is commercially available in Germany, from his catalogue. However, following this situation, he is concerned that there is so little information available on what is and isn't copyright: "I had no approach from anybody stating that *Red Sector* was copyrighted. If we're not in the know, how are we supposed to know? There ought to be a body that distributes information to PD libraries stating what is copyright."

song into your soundtracker program – not much at all really – and those two bars went, for example, *Goodbye Ruby Tuesday*, then if you were to distribute the resulting piece you may face a similar predicament to Carter USM, the pop duo which recently faced the wrath of the Rolling Stones' publishing company for using just those three words in a song.

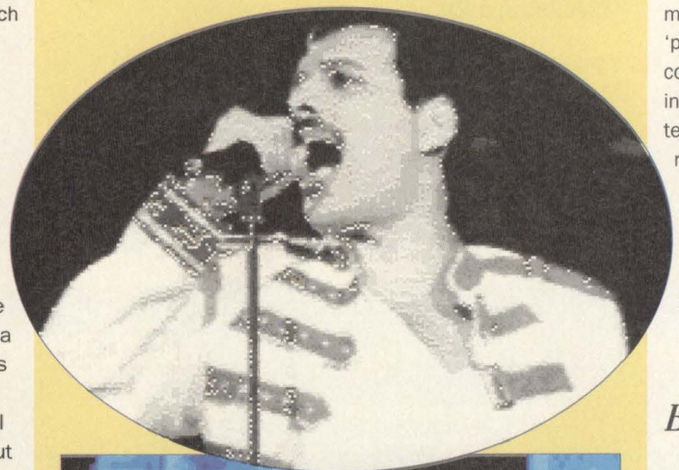
Brief slogans and catch phrases have been ruled too trivial for protection under copyright – 'yo dudes' and 'phew, what a scorcher' would be deemed pretty safe to use – but the hookline to a song, melody and all, would no doubt be seen as a substantial part of a work. And don't forget registered trademarks. I can quote the name SSI in the context of this article, but if you were to put out your own game programs under the same name, you'd probably find a representative of Strategic Simulations Incorporated knocking on the door in fairly short order.

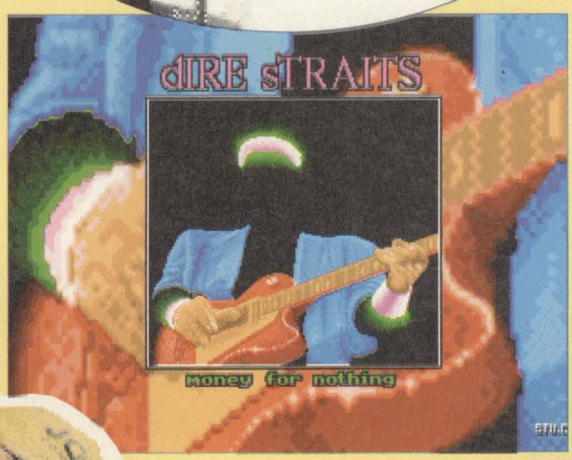
No patents for software

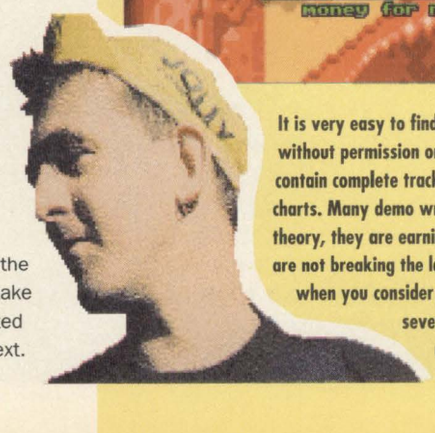
As software is expressly excluded from patent protection – a system by which the owner of an invention enjoys exclusive rights to the proceeds from it for a set number of years – and it cannot be registered with any body that has standing under law, copyright is of great importance to commercial software houses.

The legislation such companies look to is known as the Copyright, Designs and Patents Act 1988, which came into effect on August 1st, 1989, and protects any literary, dramatic, artistic or musical work, sound recordings, films, broadcast or typographical arrangements.

So where is software mentioned in the Act? The difficulty is that software can take many forms – games often have animated sequences, accompanying music and text. Then there's the code itself, and the manuals. As such, the terms 'software' and 'program' have no definitions under the Act, but courts will generally take accepted computer industry usage as the definitive use of such terms. As for what's what: manuals and papers relating to the operation and programming of computers are protected as literary and artistic works – artistic in that they may contain flow diagrams and pictures. The program itself, whether or not it ever finds its way out of the electronic medium, is considered a literary work (hardly classic reading, however), while the visuals are classed as artistic and the music is protected as a sound recording. As you'd expect, all angles are covered.





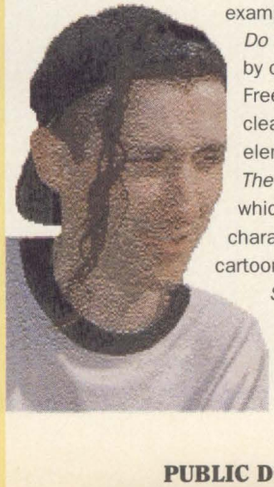


It is very easy to find music that has been sampled without permission on demo disks. Some disks even contain complete tracks, often ones currently in the charts. Many demo writers argue that because, in theory, they are earning no money from the disks they are not breaking the law. This is not the case, and when you consider that PD disks cost less than seven inch singles you can understand why record companies are not happy

"As a whole, the Do the Bartman Remix demo disk is full of what lawyers call, 'restricted acts',

Sound and vision

The ramifications of all this for PD authors, distributors and users are quite disturbing. For example, the popular title *Do The Bartman Remix* by coding group Freehand contains clearly recognisable elements from the *Do The Bartman* single which was based on characters from the cartoon series *The Simpsons*. The demo is basically a bunch of samples strung together to create a pastiche of the



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single. The soundtrack accompanies a series of images of Bart himself, plus other *Simpsons* characters. Appearing on each of the screens is the legend © Freehand.

Character merchandising is big business these days and it would seem Freehand has left itself wide open. While no copyright can exist on the name The Simpsons (courts have already held as such on *Kojak* and *The Wombles*), the cartoon characters are protected as artistic works. The author of the characters, Matt Groening, can issue copyright licences for others to exploit his creation. They will be able to sue those who market goods bearing unauthorised representations of the characters for damages, have an injunction issued to prevent further unauthorised use and see that all offending goods in the possession of the infringing manufacturer are delivered up. That goes for the originator of the infringement and any who distribute copies.

Then there's the music. In this case, the original sound recording has been copied in part, adapted through re-arrangement and issued to the public. Then there's the lyric, particularly, 'Everybody if you can, do the Bartman', which can be heard quite clearly and has copyright protection as a literary work. As a whole, the *Remix* is chock full of what lawyers would call 'restricted acts' and,

"How about all those shareware programs you use but never get around to registering? If that's the case you have, in effect, nicked them."

when you consider the licensees, the David Geffen Corporation and Fox Television among them, we're talking big-time, heavyweight lawyers.

Now consider all the other demos, slideshows and remixes readily available – a quick glance through some advertised PD listings threw up Queen, Pink Floyd, *Thunderbirds*, *Star Trek* (again), yet more *Simpsons*, *Robocop*,

Many libraries unwittingly distributed the commercial program *The Red Sector Demo Maker* as PD

When a major action of SF film hits the cinema screens you can bet that a slideshow based on it will quickly follow. It could be argued that they give the film free publicity, but official licensees would still have a case if they wished to complain about the disks

Ignorance isn't bliss, law is hell – just what do the copyright laws state?

Most pundits agree that the majority of copyright infringements are down to people's ignorance of the law: what copyright is, what it covers, what constitutes an infringement and what the penalties are for doing so.

As mentioned elsewhere in this article, copyright protects the work of an author. Ideas, concepts, names and facts are not copyright – you could quite happily code from scratch a space invader-style game without worry of action from the original author.

According to current legislation, in the shape of the Copyright, Designs and Patents Act 1988, copyright exists as soon as the work is created – be it written down or stored on a computer – and lasts for the lifetime of the author and 50 years from his or her death. In the case of a computer-generated work – one that has no human author, such as a program generated by a C compiler (see accompanying box) – the copyright belongs to the data provider and lasts for 50 years from the end of the calendar year in which it is made.

This 50-year rule largely applies to musical, graphic and literary works as well, all elements that may find their way into a PD demo or game. Interestingly, the song *Happy Birthday To You* is still under copyright – it's one of the most infringed works around.

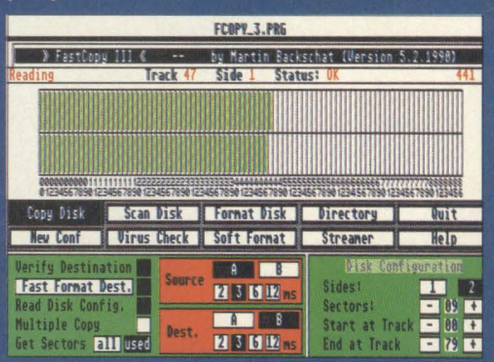
When you buy a program, you can copy and adapt it to your heart's content, provided it has been bought on terms that allow you to do so. If not, then copying a 'substantial part' of the work will result in an infringement. A substantial part refers not only to the size of the program, but to its quality. Thus if a small, but essential part of the program is copied, that's an infringement. There is no automatic right to make a back-up copy and, in the absence of permission to the contrary, if you copy a program it's an infringement.

Certain special measures of protection are on the way for, by January 1st, 1993, the European Software Directive will be incorporated into UK law. The most significant is that, although you may study the program to determine the ideas and principles behind it, using the information to develop, produce or market a substantially similar program – or 'reverse engineering' it – is a restricted act.

Further, according to Article Seven of the Directive, any act of putting into circulation, or the possession for commercial purposes of, any means solely intended to circumvent copy protection is a restricted act. In other words: hackers, watch out.

The remedies available to aggrieved copyright holders are two-fold: civil or criminal proceedings. In civil proceedings they can attempt to sue for damages, obtain an injunction to stop further infringements, ask for an account of the profits and ask that all offending copies be delivered up.

A criminal case can be brought if you knowingly, and in the course of a business, sell or hire copyrighted works. The maximum penalty for summary conviction is a £2,000 fine and/or a six-month term in jail. However, if it is an indictable offence – one that may be tried by jury – the maximum penalty on conviction is an unlimited fine and imprisonment for up to two years. Copyright infringement is a serious offence.



Copying programs are essential for backing up PD programs but commercial companies reckon they just spread piracy

Commercial programs that have found their way into the public domain

News comes in with seemingly increasing frequency of commercial programs being circulated as PD.

Computer software giant Adobe recently noticed that its *Adobe Type Manager* (*ATM*) fonts were being distributed via BBSs and PD libraries as PD software. Adobe, of course, owns the copyright to the fonts and has instigated a crackdown on their distribution.

Another story is that of the *Red Sector Demo Maker*, a program developed by the demo group Red Sector in association with German book publisher Data Becker. Though it has sold extremely well – unsurprisingly as it's a commercial program – the publisher has undoubtedly lost a huge amount in potential revenue from it appearing in libraries and on bulletin boards in this country. Many PD libraries were simply unaware of the fact that it is a commercial program, though many removed it from their listings as soon as they found out.

Then there's *Cubulus*, by Tobias Richter and Bjorn Lynne, which was released commercially in Germany but found its way into UK PD. And the eight-track music program *Oktalyser*, another commercial German offering.

Another example is *Tetracopy*, an Amiga disk copying program which has featured on many PD utility compilation disks. Because of its novelty value – you can play a game of *Tetris* while you copy disks – it was thought of as a typical PD program. It turned out, however, that the game was published by a German magazine, *Amiga Special*, and contained routines used in another commercial copying program, *XCopy*, that were especially licenced for use in the program. *XCopy* itself has also found its way on to compilation disks.

It's quite probable that the libraries and BBSs involved simply didn't realise the implications and were not engaged in deliberate piracy – after all, they're not supposed to make a profit from PD. Nevertheless, manufacturers are still being deprived of their rightful income when people start copying and distributing their products willy-nilly.

Chris Millard of London solicitors Clifford Chance warns that software developers are starting to come down hard

2000AD and *Monty Python*. Now take a look at your own PD collection. Notice anything naughty? Such is the extent of infringements nowadays, you're bound to find some images, samples or even codes that are the unpaid-for property of someone else. And how about all those shareware programs you use but never seemed to get around to registering? If that's the case, you have, in effect, nicked them.

Prosecutions

So far, there have been no convictions arising from the kind of infringements outlined above. That's not the case for software piracy, however. Last year the Federation Against

"After years of laxity towards copyright infringements, authors and licensees are fighting back with increasing vigour."

Software Theft (FAST) celebrated its first ever jailing of a games pirate after a man was found guilty of five separate offences under the 1988 Act and sentenced to three months in prison.

And only recently 39 titles – mainly digitised sound and picture demos – were seized by Trading Standards officers from PD vendor the South West Software Library in Dorset. Following the swoop, several PD libraries suddenly withdrew many such titles to await the outcome of whatever the Trading Standards authority is considering. In the meantime, both South West's proprietor Martyn Dryden and authority officials are refusing to comment, but the outcome of any action will no doubt prove very significant for PD and shareware.

Many demo programmers genuinely write their software as tributes to certain films, rock groups or TV programmes and not for financial gain. *Thunderbirds*, which crops up on many demos, is the subject of this kind of fan appreciation. In most cases the disks could be seen as free publicity – but this still does not mean that they are legally on safe ground

Clamping down

After years of laxity towards copyright infringements both of and as part of computer software, authors and

WHAT'S THIS?
TASTE IT YOU'LL LOVE IT!
YOU KNOW, YOU'LL HATE SOMETHING WHEN THEY DON'T TELL WHAT IT IS.
ANY MONSTERS UNDER MY BED TONIGHT?!
NOPE!
UH-UH
NO!
WELL THERE'D BETTER NOT BE! I'D HATE TO HAVE TO TORCH ONE WITH MY FLAME THROWER.
YOU HAVE A FLAME THROWER?!
THEY LIE.
MOM, CAN I DRIVE ON THE WAY BACK?
OF COURSE NOT, CALVIN.
CAN I JUST STEER THEN? I PROMISE I WON'T CRASH.
NO CALVIN
CAN I WORK THE GAS AND BRAKES JUST?
YOU STEER?
NO CALVIN
YOU NEVER LET ME DO ANYTHING.

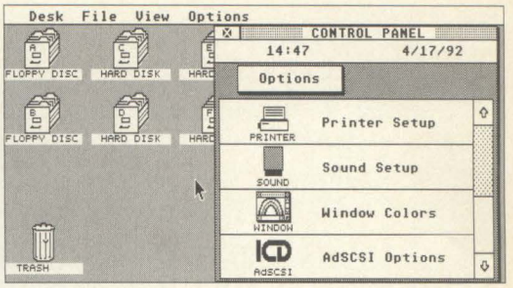
Does the Daily Express know that someone has digitised its popular *Calvin and Hobbs* cartoon strip?

licensees are now fighting back with increasing vigour. Copyright expert Christopher Millard of London solicitors firm Clifford Chance warns: "People should take software and user copyright seriously. There's a great deal at stake economically for developers. They're taking an increasingly tough line on protecting their rights and are coming down hard on people ripping off their products."

His words apply as much to commercial software as they do to PD and it's likely that the next few months will witness a significant change in the types of software available to us. Doubt has already been cast on the legitimacy of some PD graphic demos, slideshows and musical mixes featuring the work of others. The probability is that such programs will disappear from libraries and BBSs to be replaced by works featuring original pictures and original music – more the product of the author's own creativity. And isn't that what the spirit of PD and shareware is all about? Sharing works freely without resorting to the theft of intellectual property? PD

Magnetic media

In the computing world fanzines aren't produced on paper, but on disk. They are packed with features, news, reviews, even software, and there's bound to be one to suit your tastes. Nial Grimes checks out the latest batch of digital publications...



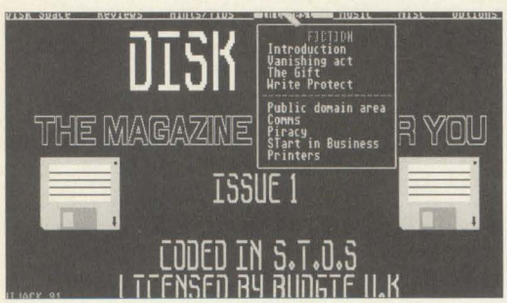
The new Atari control panel – just one of the many excellent utilities included on *ST Club* disk magazine 25

ST • ST • ST • ST • ST ZINES

Disk Space

The first issue of *Disk Space* seems promising and contains not only ST information, but a fiction section. Reviews include *Replay 4*, *ST Scan*, *Mastersound* and the Citizen 24-pin printer. The fiction forum is handled by Paul Bocij and certainly makes a change from the hackneyed review, source code and disk full of utilities formula. Most of the editorial is written to a reasonably high standard. In fact, it all sounds too good to be true until you reach the shell which has been programmed in *STOS*. This wouldn't be a problem in itself had it been written well, but suffice to say it crashed twice and hung up once while I was reviewing it – hardly a good track record! Nevertheless the contents are worth the effort and you can always use your word processor to read the text as a last resort.

ST 78%



***Disk Space*: a diskzine with a difference – it contains fictional stories! It's a pity about its tendency to crash, though**

ST Club

The 'trouble' with the public domain is that it gives you perhaps too much choice. Picking the wheat from the weeds could become a full time occupation if it were not for magazines like *Public Domain* and, the *ST Club* disk magazine. The ST Club is one of the leading public domain suppliers and each month compiles a disk containing the cream of the new releases. Not only that but each and every program is archived, meaning an average disk contains over 1.4Mb of data!

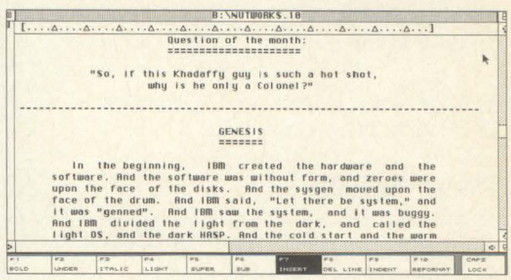
Issue 25 is up to the usual high standard and contains a total of 35 programs including a large selection of new utilities from American ST gurus Double Click Software (DC); amongst the more useful are a pop up desktop menu, text viewer and a macro handler. Add to this the range of other utilities such as the *Sagrotan* virus killer and *Arc Shell* and you have an excellent magazine. Put aside the the terribly unoriginal title and the fact that the archives are not self-extracting and the *ST Club* disk magazine is highly recommended.

ST 90%

Nutworks

Do you ever get the feeling that the computing community takes itself a little bit too seriously? If so, then *Nutworks* could be the break you've been looking for. Describing itself as an 'electronic humor magazine' (yes, having Stateside origins the spelling is unfortunately of the totally and utterly wrong variety!) it takes a zany look the world of computing. And when they say zany, they're not joking!

Each issue is approximately eight pages long and the disk supplied came with a total of 11 issues. Included on the collection is a parody of computer


B:\NUTWORKS.10
Question of the month:
"So, if this Khadaffy guy is such a hot shot, why is he only a Colonel?"
GENESIS
In the beginning, IBM created the hardware and the software. And the software was without form, and zeroes were upon the face of the disks. And the sysgen moved upon the face of the drum. And IBM said, "Let there be system," and it was "genned". And IBM saw the system, and it was buggy. And IBM divided the light from the dark, and called the light OS, and the dark HASP. And the cold start and the warm

Down? Depressed? In need of some light relief? Pick up a copy or two of *Nutworks* – you won't be disappointed!

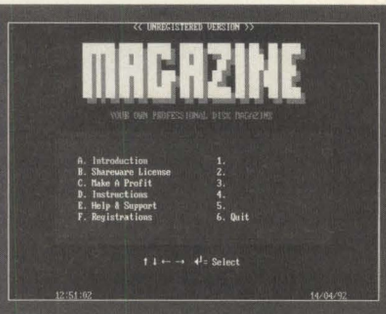
Magazine Publisher

Finally it looks as if PC owners are going to have the chance to produce their own diskzines. *Magazine Publisher* was written by Wensum Software and is responsible for, among other things, the utterly wonderful *Shareware Domain* (reviewed last issue). With just a little bit of effort, your magazine can look just as good!

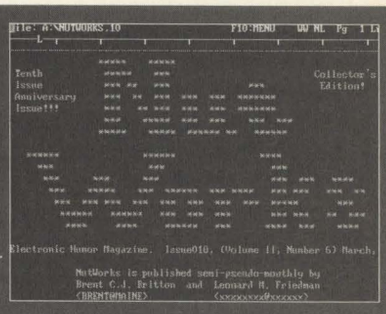
The system is based on MOS, or to give it its full title, the Magazine Operating System. As complicated as it may sound it really is very easy to use and you will have a magazine up and running in no time providing you have a word processor and a small amount of patience. MOS can also call batch files and programs, so that the freebies you will undoubtedly include on the disk can be run without making the user drop into DOS.

Quite a few of the effects that make *Shareware Domain* so special have made their way into MOS and you are also treated to some nice four channel music each time you run the magazine. The registration fee, at £49.95, is probably too much if you only intend to run a zine as a hobby, but is a small price to pay for a business venture.

PC 85%



1 Let's have a look at the program in action. First take a look at the demonstration provided. It givesyou a good idea of what you are aiming to produce. You have space for eleven articles (the Quit option is automatically included by *Magazine Publisher*)


Title: A:\NUTWORKS.10
F10:MENU
Tenth Issue Anniversary Issue!!!
Collector's Edition!
Electronic Humor Magazine. Issue010, (Volume II, Number 6) March,
NutWorks is published semi-pseudo-monthly by Brent C.J. Britton and Leonard H. Friedman

2 Next prepare the text files of articles and save them in ASCII format using a good word processor. I used *Galaxy*in this case but any word processor should be compatible. One thing to note, though; the margins must be set to a left of six and a right of 67

instruction manuals, complete with essential warnings such as: "Do not ever as long as you live throw away the box or any of the little pieces of styrofoam (even the ones shaped like peanuts) as this will invalidate your warranty!" Another article covers the creation according to IBM: "In the beginning, IBM created the hardware and the software. And the software was without form, and zeros were on the face of the disks. And the sysgen moved upon the face of the drum", which kind of sets the tone for the entire magazine.

Nutworks is supplied as ASCII text on an ST format disk, meaning that it's quite possible for Amiga and PC owners to enjoy the madness with the correct conversion. If that sounds like too much hassle, issues should also available through bulletin boards.

Nutworks is great. The language is sometimes a little 'colorful' (pah!) and computers aren't always the main centre of attention, but you'd be hard pushed to find a better way to waste time – highly addictive!

ST 83%

Where to get hold of all these great zines

It's a rich man's world but thanks to the public domain a mere couple of quid will buy the diskzine of your dreams (oh, all right, the diskzine that you thought might be a good idea while you were waiting in the rain for the number 47 bus). This month's selection can be obtained from the following sources:

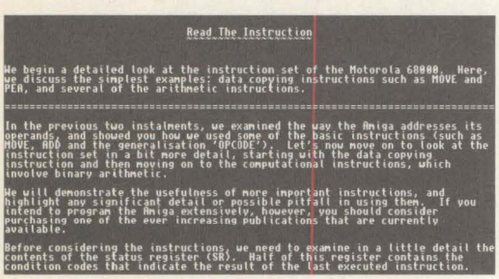
- **DISK SPACE – ST • Licenceware • Colour • 512K • £2.95 • Floppyshop ST, PO Box 273, Aberdeen AB9 8SJ**
- **GENERAL AMIGA – Amiga • Licenceware • 1Mb/Not A500 Plus compatible • £1.50 • Ronnie James, 19, Earn Court, Alloa, Clacks, Scotland FK10 1PT**
- **MAGAZINE PUBLISHER – PC • Shareware • £49.95 • 512K • Wensum Software, 91 Glendenning Road, Thorpe Park, Norwich NR1 iYN ☎ 0603 630912**
- **NUTWORKS – ASCII text (supplied on ST disk) • PD • DMG97 • Floppyshop, PO Box 273, Aberdeen AB9 8SJ**
- **PREMIER – Amiga • PD • 1Mb • PD • Andrew Dunbar, 180 Mountsorrel Lane, Rothley, Leicester LE7 7PW**
- **ST CLUB DISK MAGAZINE – ST • PD • Colour/Mono • 512K • The ST Club, 2 Broadway, Nottingham NG1 1PS**

AMIGA • AMIGA • AMIGA ZINES

General Amiga

It may come as a surprise to most diskzine authors that the Amiga is more than a games machine. Fortunately it's a situation that *General Amiga* recognises and, as the title suggests, it covers the scene with unusual balance. Issue nine is typical of this balance and contains, amongst other things, articles covering 68000 programming, printers, public domain and a handy jargon busters section which this month looks at monitor and communication terms. If this sounds a little bit too high brow, you can always drop into *China Challenge* for a spot of *Shanghai* (or more than a spot depending on how addicted you become!)

The whole magazine is put together (incredibly) by a single person and the editorial is very well written – this guy obviously knows what he's talking about! Unfortunately the menu system is not A500 Plus compatible, but the text can always be read using the ever-popular *ppMore* utility. Check it out.


Read The Instruction
We begin a detailed look at the instruction set of the Motorola 68000. Here, we discuss the simplest examples; data copying instructions such as MOVE and PEA, and several of the arithmetic instructions.
In the previous two instalments, we examined the way the Amiga addresses its operands, and showed you how we used some of the basic instructions (such as MOVE, ADD and the generalisation 'OPCODE'). Let's now move on to look at the instruction set in a bit more detail, starting with the data copying instruction and then moving on to the computational instructions, which involve binary arithmetic.
We will demonstrate the usefulness of more important instructions, and highlight any significant detail or possible pitfall in using them. If you intend to program the Amiga extensively, however, you should consider purchasing one of the ever increasing publications that are currently available.
Before considering the instructions, we need to examine in a little detail the contents of the status register (SR). Half of this register contains the condition codes that indicate the result of the last executed instruction.

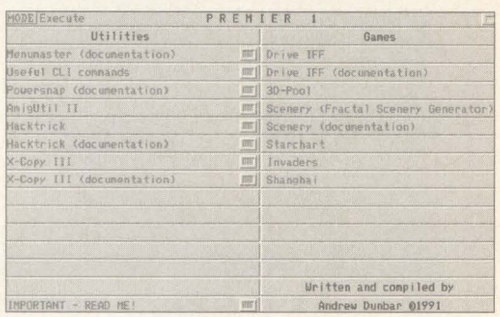
Not to be confused with a popular insurance company, *General Amiga* caters for inexperienced and expert users alike

AMIGA 87%

Premier

Premier is yet another one of those 'new age' disk magazines that chooses not to include any articles; yep, it's just PD & shareware all the way which can't be a bad thing. It does, however, make a break from the crowd by resisting the temptation to include the very latest releases be they good or bad. Instead the software is chosen on its reliability and usually consist of all-time classics.

The current issue is the very first and includes *Menumaster* (which itself is used as the shell), *3D Pool*, *Drive IFF*, *Hacktrick* and a scenery generator.



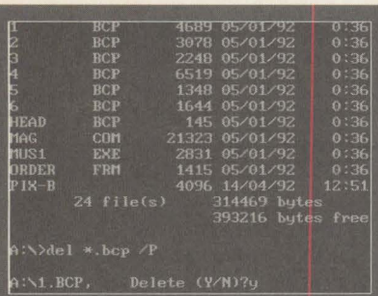
With not an article in sight, *Premier* devotes plenty of space to the very best Amiga PD and shareware

Also included are several CLI commands including *Stars and Stripes* to add a little bit of style to your Workbench. *Premier* will undoubtedly be handy for new Amiga owners but its appeal to experienced users, who will probably already have most of the software, will be limited.

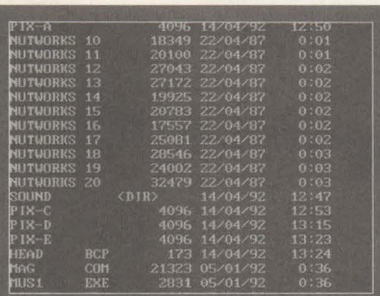
AMIGA 79%

Is your zine better than anything we've covered here? Let the world know by getting some coverage in Britain's best public domain magazine. To satisfy your taste for instant fame simply send your masterpieces to: ***Zine Scene, Public Domain, 30, Monmouth Street, Bath BA1 2BW***

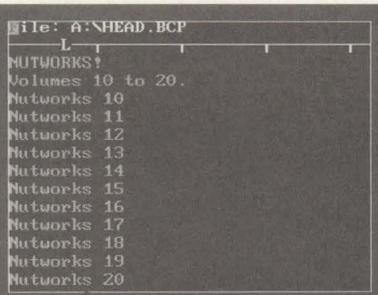
PD



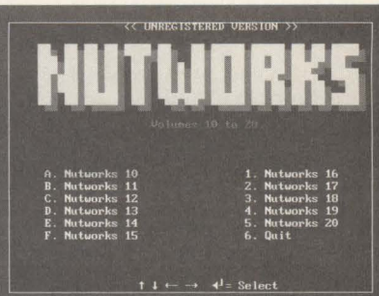
3 **The text files are currently named 1.BCP through to 11.BCP. At the moment they are full of the text used in the demo. In order to use your own files this demo text must first be deleted. You do this using the MS-DOS DEL command as in the grab above**



4 **Rename your own files according to where you would like them to appear in the menu (this is not the name they will be given, however – that is done in the next stage). Programs and batch filescan also be run from a menu option by naming the files PROG1, PROG2, etc**



5 **Finally the menu needs to be designed. This is a file called HEAD.BCP and must once again be written using a text editor. The first two lines provide the headlines. The rest is the menu text, so make sure the names you enter are in the same order as the files**



6 **The finished product; but this is only the beginning. By using batch files it's possible to set up multi-layer magazines containing hundreds of articles, programs and pictures. Watch out *Shareware Domain* – you could find that you've suddenly got some competition!**

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DEMO.103	WHAT NOT TO DO - 8 short comical animations from the Inner Circle. Very funny.
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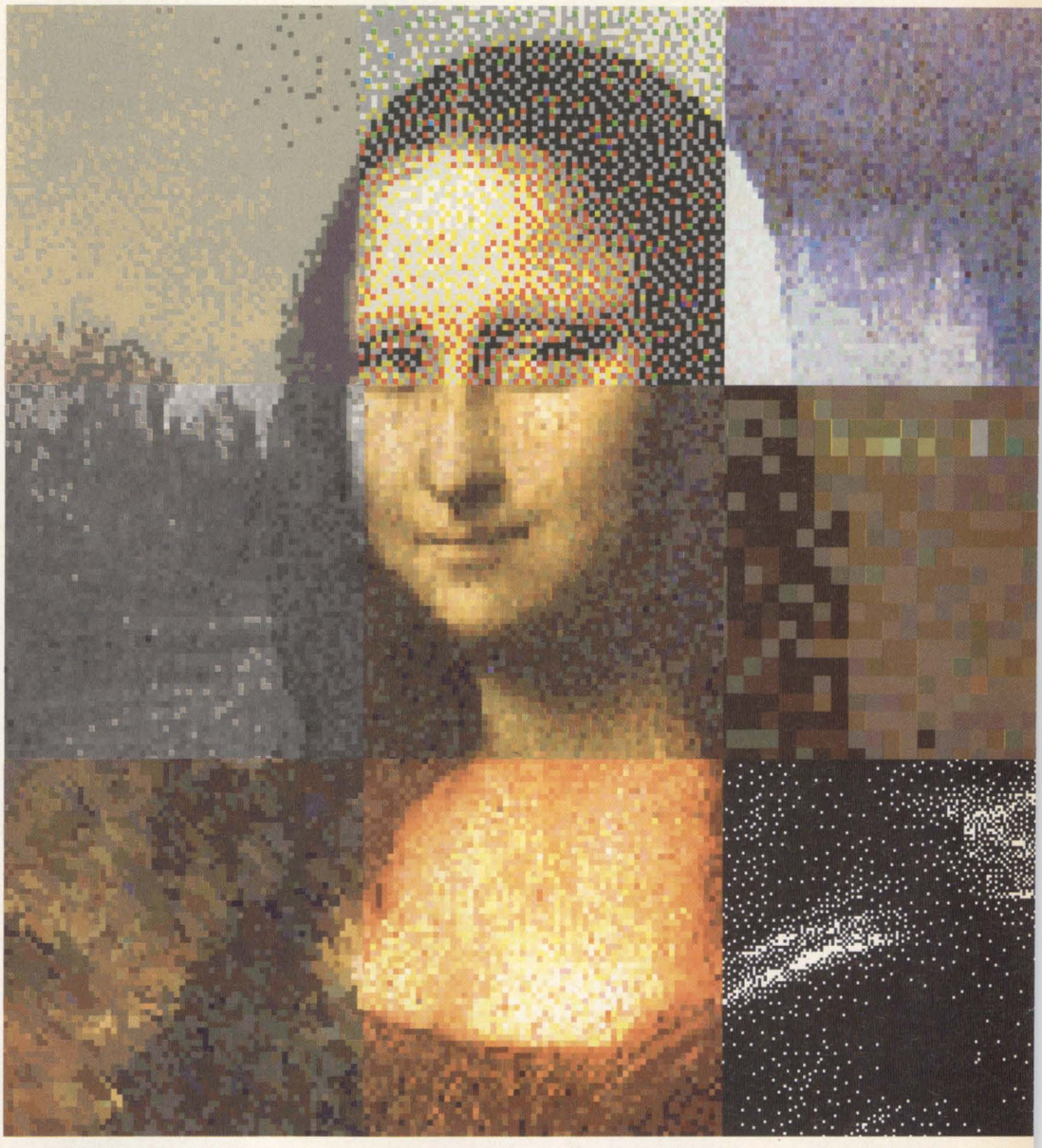
Altered images

Changing the face of art as we know it – from old masters to black and white line drawings there isn't an image that can't be manipulated using public domain and shareware graphics programs. To find out what can be done, we let Tim Howell's imagination run wild...



Take an image, any image. Whether it's colour or black and white; on the Amiga, PC or ST; or clip art, in a demo or from a slideshow, you can alter it in some way using PD programs. Creative graphics needn't be confined to artists who are a dab hand at using a paint package. Using utilities available in the public domain you can easily get hold of and manipulate all kinds of images.

But why would you need to? Surely if you want a picture you just draw it yourself in an art package or digitise it using a scanner? Fair enough, but there are plenty of occasions when you have a digital picture that just isn't quite right, and it's necessary to mess about with it to some extent:

- Suppose you've seen an image on an Amiga demo that you'd really like to use on your ST, can you do anything to get the image on to your computer?
- Perhaps you've come across some amazing clip art on the PC but it's in the wrong format for your Amiga – how can you transfer the file to your Amiga and convert it so your DTP package can use it?
- When you've got an image that takes up a lot of disk space, what do you do to make it smaller?
- If you have a colour image that you want to include in a mono DTP page how do you make sure that it will print out clearly in black and white?

The answer to all these problems and more is to use graphics manipulation software. There are dozens of programs available in the public domain

Jargon Busting ● Jargon Busting ● Jargon Busting ● Jargon Busting

CONVERT – Term to describe changing one image format into another; essential if you want to view and use images on different computers

CROP – To reduce the size of an image, by chopping the unwanted edges off to make it fit a smaller area

DITHER – Used to reduce the amount of colour in an image by converting the palette from a large number of colours into a smaller number. Dithering can also be used to convert colour images to black and white by the use of stippling – using dot patterns to represent colours. A large number of different dithering techniques have been created, many of which are named after the person who created them

GREY SCALE – To turn a previously colour image into one with shades of grey only

MIRROR – Used to flip an image across a vertical or horizontal axis as if it's looking in a mirror

REVERSE/NEGATIVE – To make the image look like a film negative, with the colour values in the new image the direct opposite in the colour spectrum of what they were originally

ROTATE – Used to rotate an image by an amount of degrees, usually 90, 180 or 270.

REDUCE – Enables you to create an image with fewer colours than the original image it is derived from. Similar to DITHERING but they use different techniques and the results are slightly different

SCALE – Increase or decrease the size of an image according to a percentage value

SMUDGE – To make an image look 'rougher' by increasing the size of the pixels

SHARPEN – To create an image with more contrast in its colouring than the original

SOFTEN – Creates an image with less contrast than the source. One use for this is to minimise the effect of scanning as it reduces interference

SPATIALLY POSTERISE – A technique only found in *Graphics Workshop*, this creates an image that is made up of large square areas

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cont. from p33

that can be used to obtain images, convert them between formats and alter them so they don't look anything like they used to. Once you've got your image, you can do almost anything to it.

To find out how you can do these things and so much more, we'll take you through the five essential steps you need to get your images, manipulate them and then work out what to do with them next...

1 Obtaining your images

Before you can manipulate images, you need to have some to work on. There are several ways of going about this.

The obvious way is to draw the pictures yourself. There are a number of PD and shareware art packages available for all three machines, and we did a round up of some of them in *Public Domain* issue three. Creating images from scratch can take a long time though, so it may be necessary to take some 'creative licence' and 'borrow' ideas from other peoples' work, just like so many demo writers...

One way of getting hold of prepared images is to look at slideshow and clip art disks. These are available from most libraries and often the images

"Using utilites available in the public domain you can easily get hold of and manipulate all kinds of images."

used in slideshows can be copied directly from the original disk to your own work disk for you to cut and paste into your own creations.

Clip art is smaller in size than the complete, full-page colour images found on slideshow disks. These files are meant to be directly imported into your desktop publishing documents, and can just as easily be incorporated in your own graphic images. One problem with clip art is that it is often composed of black and white images which may not be appropriate for the image you want to create. Also, clip art is often in PCX format, so it may need to be converted into a format that your computer can use.

On the Amiga there are disks available which contain brushes. These are like clip art but are in colour. *Cartoon Brushes* is one such example and is filled with various cartoon characters that (copyright problem possibilities aside) you can cut out and use in your images, placing them anywhere on-screen.

Another option is to 'rip' the images from different programs. There are a few programs available that enable you to load a program and then, when you've exited the program or reset the computer, you can use these ripping programs to search through memory for the picture information

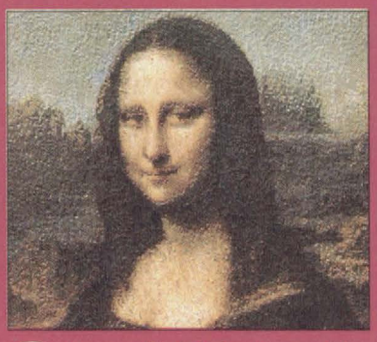
Putting image manipulation software into practice – how we created our cover using

STEP-BY-STEP GUIDE

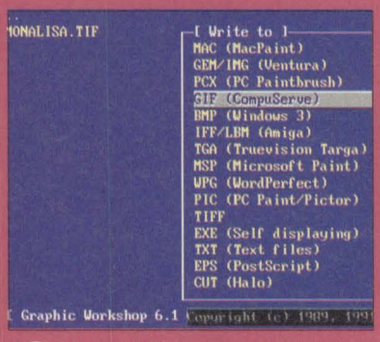
Our cover this month is proof of the quality of PD and shareware software. Forget those expensive commercial offerings, our stunning cover image was created soley using freely-distribuatable software.

Once we had scanned in our image of old Mona we used a mixture of public domain and shareware programs to demonstrate that impressive effects can be created easily and cheaply. To show you how, here's a step by step guide...

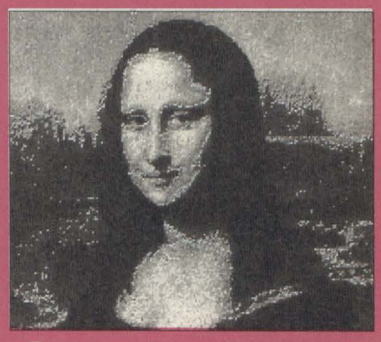
After tinkering around with the image using a number of programs on all three machines, had a close look at them to see which ones were good enough to use on the cover, in terms of both variety and image quality. Once we had those sorted out we assembled our cover, and you're holding it in your hands right now!



1 As we couldn't find an image of the Mona Lisa on any of our slideshow disks, we scanned in a photo of it using a scanner hooked up to a Macintosh. The scanned image was saved as a TIFF file, which we then transferred to a PC disk to manipulate. While we used a Mac for the scanning, we could have used one hooked up to the PC, using *Graphics Workshop*'s built-in scanning software

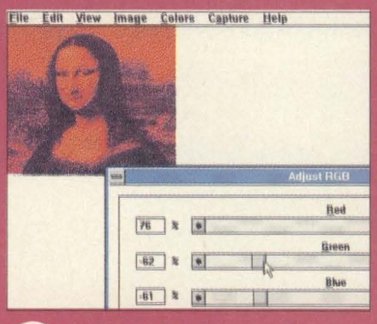


2 Once the file was on a PC disk, we immediately loaded it onto *Graphics Workshop*. While this program can handle TIFF images easily enough, we wanted a file format that could be used by all three computers, namely the GIF standard which has been created for just such a purpose. To convert the image, press F2 and select the format you want the destination image to be; GIF in this case

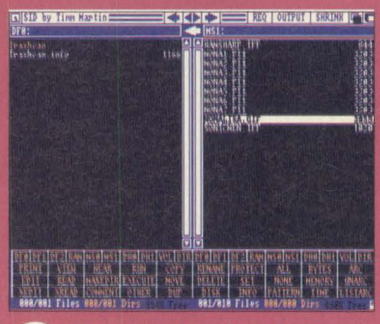


3 Now on to some image manipulation. To start off with we'll turn the colour Mona Lisa image into a mono (or black and white) one. Using the grey scale option on *Graphics Workshop* set at 32 levels, this can be accomplished easily. This is also what you could do if you wanted to use a colour image on a mono page in a DTP package – it would print out better with better definition

8 One of the most simple transformations is Flipping the image, which just turns the image upside down across a horizontal axis. To make it look a bit more interesting we'll flip the image again, this time sideways across the vertical axis. It may be a simple technique, but it's definitely effective



9 To change the colours on the image, we'll try a different PC manipulation package: *Paint Shop Professional* which can change the Red Green Blue (or RGB) values of an image. For our cover we increased the red values while decreasing the blue and green ones to give it a pinkish appearance



10 That's enough work on the PC, let's try using the Amiga and ST to see what thry're capable of. Before we can do anything on the Amiga, we need to transfer the file on the PC to a PC-formatted disk, and then use *MessySID* on the Amiga to transfer the GIF file from the PC disk and on to an Amiga disk

11 Once the image has been transferred we need to convert the GIF file to the format most Amiga programs can use: IFF. To do this, we need to use the program *HamSharp*, found on the *Sonic Developments Converters Pack*. This will import the GIF file and then convert it to a HAM image.

and then save the image for your own use. The *3rd Day* ripper is probably the best program for doing this on the Amiga, while on the ST *ProbeST* is also very good, although it sometimes has problems with handling palette information. On the PC there are a few graphics ripping programs around, but the quality varies enormously – many won't grab images from some programs, mainly those that use VGA graphics.

2 Image formats

Depending on how you get your images, they may be in different file formats. So, if you want to use them in your art package or slideshow, the program might not be able to recognise the type of image you want to use.

The format of the image you can use varies with different computers. The Amiga commonly uses IFF/ILBM files, the PC uses PCX and GIF images, while the ST has both the *Degas* and *Neochrome* standards. For a more detailed description of what these standards are all about, check out the File Formats box-out in this feature.

If you like an image that is in one format and want to use it don't panic; it's more than likely that you'll be able to change it to a format that you can use. There are many programs that have been specifically designed for converting images from one format to another. Image conversion is essential for changing the format of an image, but another reason for it is that some image formats can take up too much space on disk so it's often handy to convert them to another more space-efficient format.

"There are many programs that have been specifically designed for converting images from one format to another."

The supreme example of a program that is capable of converting images between different formats (as well as being able to do a lot more besides) is *Graphics Workshop* on the PC. This enables you to convert several different formats as well as perform various manipulation techniques. Another all-round program is *Paint Shop Professional* which is less comprehensive but can handle some formats that *Graphics Workshop* can't.

PicSwitch on the ST can read a wide range of formats, including some of those used on the 8-bit Ataris as well as all the major ST standards. (It is also supposed to handle some forms of IFF images but we didn't find any it could support.) The program is easy to use as it can automatically detect which format an image is before displaying. *ViewGIF*, also for the ST, is also capable of converting between a

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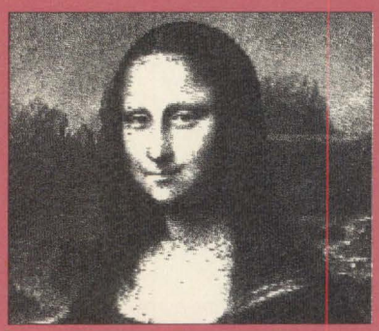
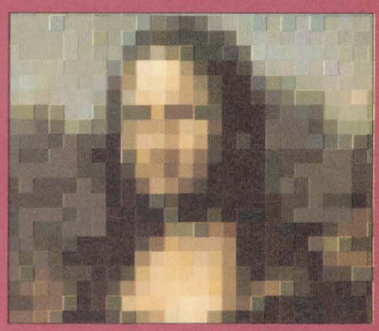
three computers, different techniques and a lttle help from Leonardo Da Vinci



4 Another way of turning a colour image into a mono image is to dither it. *Graphics Workshop* has a number of dithering options, which have all been named after the people who created each dithering technique. Depending on the technique chosen, the results can vary tremendously in terms of definition and intensity. We'll try the Bayer technique set at 300 per cent for this image

5 For a more dramatic effect we can try the Reverse option. This takes the original colour values and makes them the direct opposite on the colour spectrum to what they should be, creating a sort of ghosting effect, the sort of thng you see when you look at a film negative. The result isn't overly attractive but it does create a dramatic effect and would look good in something like a demo

6 One of the other effects which is unusual if not overly dramatic is the Smudge option. This creates a 'speckled' effect, with the new image looking as if the original is being viewed through a rain-covered window. With *Graphics Workshop* the image is only slightly altered with the smudging option, so we smudged our image three times for an even more specked effect



7 Spatial Posterisation is one of the weirdest manipulation techniques, creating the sort of effect that you see on the news when they're trying to hide the identity of someone. This technique enlarges the pixels to a very large extent, somehow blending the colours at the same time to resemble the original image and make it all look very interesting. We want the new image to use 8x8 pixels

12 With the HAM image now ready to use, we'll load it into *ImageLab* which can subject images to manipulations that *Graphics Workshop* isn't capable of. For a start we'll try one of the program's more unusual transformations, the Fourier technique. Pity they didn't have medicine for this type of rash in the 16th Century

13 For another weird effect – *ImageLab* isn't very traditional in the images it produces – we'll try one of the program's Gamme Correction techniques. This produces very psychedelic images which aren't all that artistically tasteful but could have some application in real life. Maybe. Very striking though

14 Now let's see what the ST cam do. The GIF file is already on a PC-formatted disk which the ST can read normally, so we've got no problems there. We'll try using *ViewGIF* to see what it has to offer in the way of manipulation. Interestingly, *ViewGIF* automatically manipulates the the image as it loads it

15 With the final image on our cover, the Bart image, we used a graphics ripping program on the Amiga and ripped the image out of an Amiga music disk. Then, once we had the main image, we imported it into a graphics program and added the Mona Lisa-style hair on top of it. What could we call him now?

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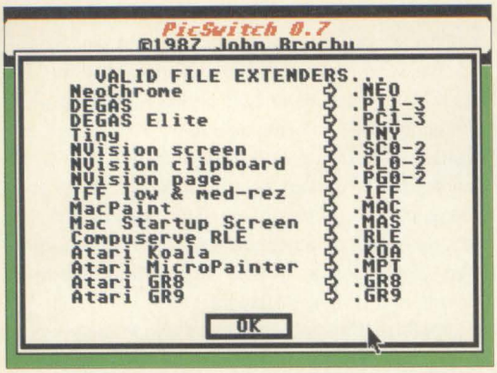
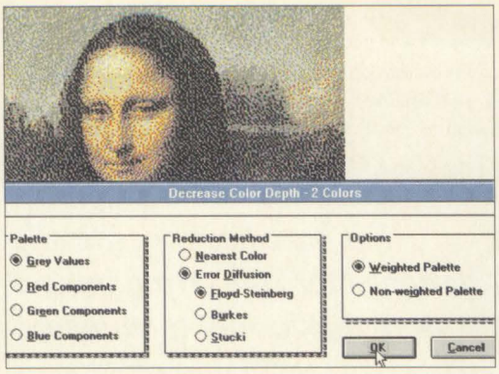


PicSwitch on the ST is capable of handling many image formats, including those used on the now-ancient Atari 8-bit machines



Paint Shop Professional makes good use of Windows to provide a handy WIMP interface to its functions, in this case dithering

The Amiga doesn't have an all-inclusive image conversion program; instead it fits many specific programs on a single disk

File formats

There is a wide range of standard file formats available which cover the whole spectrum of computers, ranging from the Commodore 64 right up to Sun workstations. Here's a brief run-down on some of the ones you're more likely to come across...

DOODLE – Format created by the Commodore 64 graphics package *Doodle*

EPS – Encapsulated PostScript. A method of including PostScript language programs into the information processed by applications. Mainly used in sophisticated page layout software

GIF – Graphics Interchange Format. Compressed format used by the international on-line subscriber mail service Compuserve. Popular on the PC but supported on Amiga and ST as well

IFF/ILBM – Interchange File Format/InterLeaved BitMap. Developed by Electronic Arts as a graphics standard for the Amiga at first but now also used by the PC. The PC may have problems with Amiga Hold And Modify (HAM) images which can have up to 4,096 colours, as do many Amiga art programs, including commercial ones

MAC – From *MacPaint* on the Apple Macintosh. Often a source of good clip art images for DTP packages

NEO – Format originally create by *Neochrome* on the ST and now used by most ST art packages

PCX – Format created by *PC Paintbrush* on the PC and also used by many other art programs.

PI1 / PI2/ PI3 – The low, medium and high resolution image files used by *Degas* images on the ST

PICT – Another format that originated on the Mac

SPX – Spectrum file format on the ST. Fools it into thinking it can display 512 colour images on-screen at once, instead of the usual 16

TIFF – Tagged Image File Format. Mainly used by commercial applications for DTP images

number of file formats, not only supporting the GIF standard but also *Neochrome*, *Degas* and, again to a limited extent, the Amiga's IFF image standard.

Unfortunately there isn't an all-encompassing Amiga package that can convert a number of different formats; usually the tools come in the form of single files which are capable of converting only one or two file standards. A large collection of these can be found on the *Sonic Developments Converters Pack* which can convert most ST formats to IFF as well as handle GIF and IFF HAM images. *IFF2PCX* will convert the Amiga's IFF images into PCX files for the PC.

Apart from these tools, there of dozens of others available – too many to list here – that do only one or two functions, but could be of use to you. Have a hunt through a few PD catalogues or on a couple of BBSs just to get some idea of what's around.

3 Disk formats

Whether you can convert these images depends on whether your computer can read the disks that contain them in the first place. The Amiga, PC and ST all have different disk formats which means that they can't easily read each other's disks. There are exceptions: the ST is able to read PC disks normally without any extra software.

In fact, PC-formatted disks are the best ones to use for all three machines, if you want to transfer files between them – with a bit of help all three machines can read the same disks, making it easy to transfer the files across the different formats.

Neither the PC or ST can read Amiga disks, so if you want to use any images created on an Amiga you'll have to transfer them to a PC disk first. There are a couple of good options open to you. *MessySID* is probably the easiest way of transferring files between Amiga and PC disks, using the popular file tool *SID*. Also, the *Sonic Developments Converters Pack* can be set up to read and write to both the Amiga and PC disk formats as well.

"With a bit of help all three machines can read the same disks, making it easy to transfer files across the different formats."

While the ST can read PC disks, the opposite isn't the case. When files are to be converted between the ST and PC there are a couple of options. It's possible for the ST to be programmed to format PC disks which aren't too different from it's own format. *DC Format 3* is one program that can handle both formats. There are programs on the PC that enable it to be able to read ST disks – *ST2PC* is one such tool although there are others available.

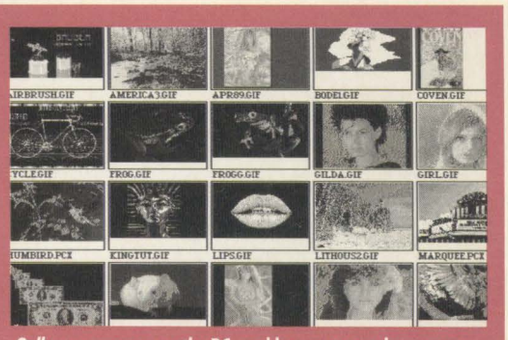
Slideshows/Picture Viewers

After you've collected a number of images that you've created, and unless you don't have any desire to show your work off to other users, you could include them on a slideshow disk. There are a number of slideshow programs available for all three machines which enable you to arrange your picture files sequentially on a disk, loading and displaying them one at a time.

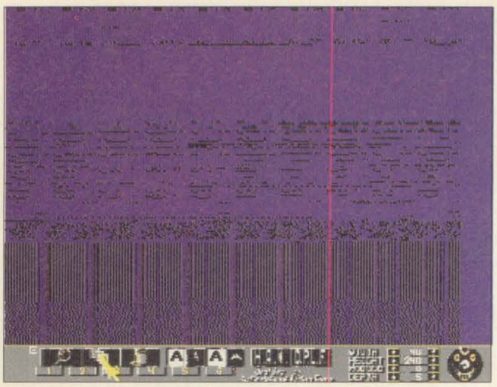
There are two types of programs that can be used for this task. On a simple level you could use a graphics viewing utility and look at the images individually, combining the tool with a batch file to load in several pictures one at a time in sequence.

The other option is to use a dedicated slideshow creation program which, will a bit of help on your part, will carry out the load and display functions automatically. Some of the more advanced slideshow programs enable you to display your pictures with the help of special effects such as screen fades and dissolves, making the slideshow production look both interesting and professional.

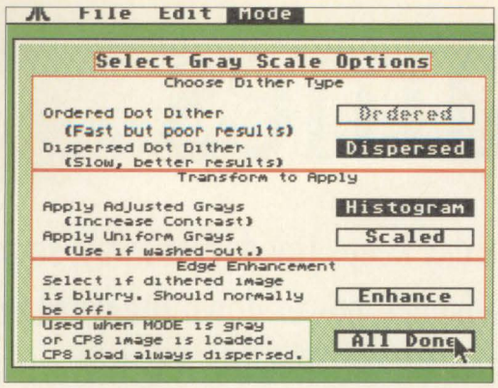
Look out for a round-up of slideshow programs in a forthcoming issue of *Public Domain*.



Gallery, a program on the PC, enables you to catalogue your graphic images and display them, in much the same way as you'd see them on the walls of your local art gallery



Using ripping programs such as *3rd Day*, on the Amiga, it's possible to search through memory and save images you find



***ViewGIF*, as well as letting you view a number of popular file formats, also lets you manipulate them in several different ways**

Of the three machines the PC is best off, because it can read its own disks! Mind you, to be able to read these disks the PC needs to have a 3.5-inch drive capable of reading and writing 720K disks.

4 Manipulation Techniques

Once you've got your basic image, the next stage is working out what to do with it. This is where things get interesting. You can subject your images to a wide range of manipulative techniques, making them virtually unrecognisable from how they looked originally. You could do this purely for fun, just to see what the images look like after you've inverted or stretched them, but there are are practical reasons for playing around with images.

If you are involved in desktop publishing (DTP) a number of occasions may arise where image manipulation becomes desirable. Often colour images, when used on a black and white (or mono) pages, don't look all that clear once printed out.

To improve the chances of a quality image, image manipulation can be used to either turn the colour image into shades of grey or the image can be dithered. Dithering an image may give it a more 'speckled' effect, but it can improve the appearance of a picture that has been printed on a low-quality – in DTP terms – dot matrix printer.

If an image is too large or too small, or you want to see just part of it, you can use cropping techniques to 'trim' the file down to the size you want. This is much like cutting a part of an image out using an art program, but, since most manipulation programs can handle several image formats, cropping an image with one of these programs may give you extra flexibility.

As well as these practical reasons, you can use graphics manipulation for creating weird and wonderful effects for the sake of art.

There are few programs on the Amiga, PC and ST that can be used to play around with images. The most advanced programs are on the PC which has two excellent tools.

Graphics Workshop is an amazing tool, one that is both easy to use and has a lot of features. When it comes to graphics manipulation there aren't any programs that can do more; dithering, grey scaling and reversing the colours are just a few of the abilities it has in its repertoire.

Another advanced utility on the PC is *Paint Shop Professional* which runs through the Windows operating system. It is a tool more concerned with converting images than manipulating them, and is able to handle almost as many file formats as *Graphics Workshop*, although it isn't as good an all-round performer overall.

Atari Image Manager on the ST and *ImageLab* on the Amiga are reasonably well-equipped but pale in comparison with their PC counterparts in terms of features and flexibility. *Atari Image Manager* handles *Neochrome* and *Degas* format images and can pull and stretch images as well as transform them according to different mathematical formulae. *ImageLab* can do pretty much the same thing but to IFF images. *ViewGIF*, on the ST, is also reasonably competent if not overly complex – it can handle GIF images directly and doesn't need to have them converted before it can use them, although it can handle other formats as well.

5 What to do with them next

After you've transferred, converted and manipulated your images, then what?

If you've manipulated the images for use in a DTP document then you'll probably want to incorporate it into your DTP page.

If, on the other hand, you've produced them for some artistic reason, then you have a couple of options. If you want to use the manipulated images in a picture of your own, then you'll have to use an art package to import the new image, cut out the bits you want to use, and then paste them into your image. This way you could use any number of manipulated images, incorporating them into your own creation, limited by your computer's storage capacity and, ultimately, your imagination.

Another option is that once you've got your final image you could go and show your handiwork to other people. If you've only got one image you could use an image viewing utility to load and display the single image, while if you have a number of them you could join them together and display the images as part of a slide show. And you could even release them for distribution in the public domain... PD

In conclusion

There are many programs available in the public domain that let you subject graphic images to all sorts of weird and wonderful transformations. No matter what computer you've got you can manipulate images, not only ones that have been created on your computer but those from other formats as well.

Where to get them

Amiga

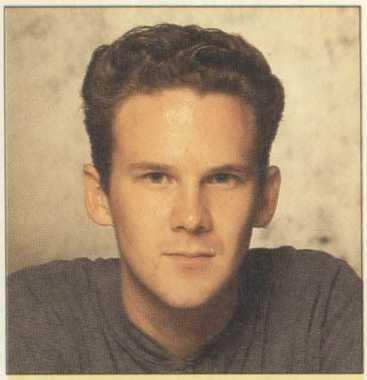
- **CARTOON BRUSHES** – PD • Disk U032 • 512K • Software Expressions, Suite 4, Hebron House, Sion Road, Bedminster, Bristol BS3 3BD ☎ 0272 637634
- **3RD DAY** – PD • 512K • Disk 1417 •17-Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH ☎ 0924 366982
- **IFF2PCX** – Shareware • Registration: Discretionary • 512K • Disk 1417 • 17 Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH ☎ 0924 366982
- **IMAGELAB** – Shareware • 512K • Ed Lib, Scotland Farm, Stockwood Road, Brislington, Bristol BS4 5LU (Review: issue four)
- **MESSYSID** – Shareware • Registration: $25 (£15) • 512K • Disk U619 • NBS, 1 Chain Lane, Newport, Isle of Wight PO30 5QA ☎ 0983 529594 (Review: issue three)
- **SONIC DEVELOPMENTS CONVERTERS PACK** – PD/Shareware • Disk 1221 • 17-Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH ☎ 0924 366982

PC

- **GRAPHICS WORKSHOP** – Shareware • Registration: $40 (£25) • Disk PCI-562 • EGA • 640K recommended • PC Independent User Group, Computer Advice Centre, 87 High Street, Tunbridge, Kent TN9 1RX ☎ 0732 771512 (Review: issue six)
- **PAINT SHOP PROFESSIONAL** – Shareware • Registration: $39 (£25) • EGA • Windows • 1Mb • Nildram Software, 26 Stanley Hill Avenue, Amersham, Buckinghamshire HP7 9BD ☎ 0494 432342
- **ST2PC** – PD • 512K • CGA • Disk 2445 • The Public Domain and Shareware Library, Winscombe House, Beacon Road, Crowborough, Sussex TN6 1UL ☎ 0892 663298

ST

- **ATARI IMAGE MANAGER** – PD • 1Mb recommended • Disk 339 • Merlin PD, 11 Grange Close, Minchinhampton, Stroud, Glos GL3 9DF ☎ 0453 882793 (Review: issue five)
- **DC FORMAT 3.01** – PD • 512K • Disk 549 • South West Software Library, PO Box 562, Wimborne, Dorset BH21 2YD
- **GEMVIEW** – PD • Disk 1905 • 1Mb recommended • South West Software Library, PO Box 562, Wimborne, Dorset BH21 2YD (Review: issue five)
- **PICSWITCH** – Shareware • Registration: Discretionary • 512K • EAPD, PO Box 123, Stowmarket, Suffolk IP14 4BW ☎ 0449 774104
- **PROBEST** – Shareware • Registration: £5 • 512K • Merlin PD, 11 Grange Close, Minchinhampton, Stroud, Glos GL3 9DF ☎ 0453 882793 (Review: issue seven)
- **VIEWGIF** – Shareware • Registration: $20 (£12) • 512K • Disk 1633 • South West Software Library, PO Box 562, Wimborne, Dorset BH21 2YD



Games

A game a day keeps the doctor away, so pack up the spreadsheet, power down the word processor and plug in a joystick while Adam Waring prescribes a dose of fun and frivolity to keep you on your toes and in the very best of health. Come on now, open wide, it's doctor's orders...

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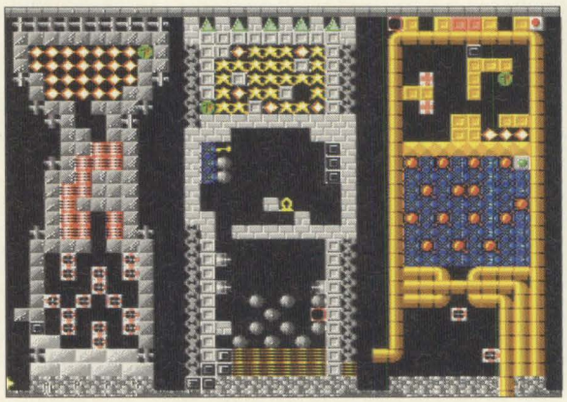
Since Jeff Minter released *Llamatron* into the public domain as shareware, there has been a marked increase in the number of other games put out as shareware for a small registration fee. These tend to follow a similar format; a low fee, typically around a fiver or so, and a couple of extra goodies thrown in as incentives to register.

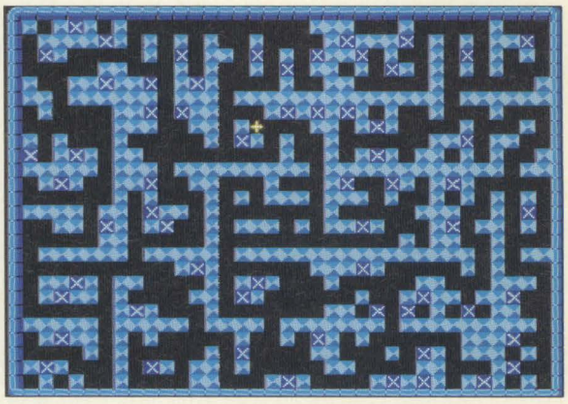
This is all fine and groovy, but authors should bear in mind that people are only likely to register a product if it's of a better quality that the sort of titles they might pick up as public domain. While many of the products are indeed very good, others are less impressive. You can't help but get feeling than games that would normally have been released as PD have been coming out as shareware, 'cashing in' on the success of Jeff Minter's games.

The question is, does putting out these inferior games as shareware devalue the whole concept of try-before-you-buy? A game has to be something really special before you can expect people to shell out the registration fee for it.

***Llamatron* was special, and so are a few others such as *Quatrix* and *Asteroids*, both reviewed this issue. These games have longevity, are great fun, and are easily worth the low cost the authors ask. But others, though they may initially while away a few minutes of leisure, are unlikely to outlast the period in which the user must register, in which case, they won't bother.**



One of the more difficult levels that you'll meet later in the game



All you have to do is get to the exit in this level, but which one?

Cyadonia

This is the sequel to a game reviewed in the the very first issue of *Public Domain*. That was called *Cyad*, this is called *Cyadonia*. Does it offer anything apart from four extra letters in its title?

It's based on a very simple concept; you control a blob that can be moved using the joystick. Once you start moving in any particular direction, you keep on going until you hit another surface where you can choose in which direction you want to travel next.

Once a puzzle's been solved, can move to any of the connected boxes to another one out

The game is split into a series of 49 screens, arranged in a seven-by-seven grid. You start in the centre and once you've solved that puzzle you can move to any of the ones surrounding it. As you solve puzzles, more and more options open up as you move towards the edges of the grid. They're arranged with the more difficult puzzles on the outside. This layout has several advantages; one is that if you're stumped by a particular screen, you can always try another and come back later.

To complete each screen you have to make your way to the exit. First of all you have to collect all the diamonds on screen (some have loads, others have none), open various doors, and complete other tasks that only become apparent after you've managed to get yourself killed half a dozen times.

There are loads of little objects that you'll need to use to complete the levels. They are introduced in stages, and when you come across a new one the first thing you have to do is discover exactly what it does...

Lives are unlimited, and you can try and solve as many screens as you like before you have to switch the computer off and go and eat your tea.

Graphics are necessarily small and the music is groovy. The game has been put together well and should keep you glued to the computer's screen for quite some time. It's basically the same game as its predecessor, but has better graphics and loads more objects added. If you liked the original, you'll like this even more and if you haven't played it before, you're in for quite a treat.

IN BRIEF

Type	Licenceware
Price	£3.50
Author	Jamez Newcome
Requirements	1Mb
Disk number	LPD67

Available from:
Déjà Vu, 25 Park Road, Wigan, Lancs, WN6 7AA ☎ 0942 495261

AMIGA 90%

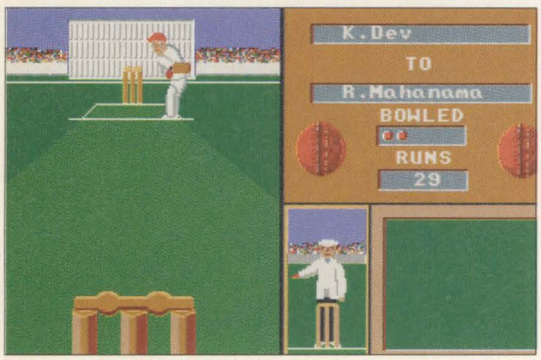
International Cricket II

There's nothing like a lazy summer's Sunday afternoon, sat in the shade of the beer tent watching two teams of 11 men thwacking a ball about on an immaculately-mowed green and running around a lot.

So what are you doing stuck inside playing on your computer, then? If you must spend those precious sunshine months in front of your monitor then at least you can have a glimpse of what it's like to play the real thing.

International Cricket II is *not* a sequel to the *International Cricket* game reviewed in issue six; it's not even by the same programmer and was actually written *before* the other game. The reason is that the program was originally called *International Cricket*, but when the other one came out with the same title, the author decided to re-release his version, updated and with a 'new' name.

The distribution disk has several options disabled; you'll only get to use them once you've forked out the registration fee. Once you've loaded the game all you can do is select the teams you and the computer play (you only have a choice of two: India and Sri Lanka) and select Play Game.



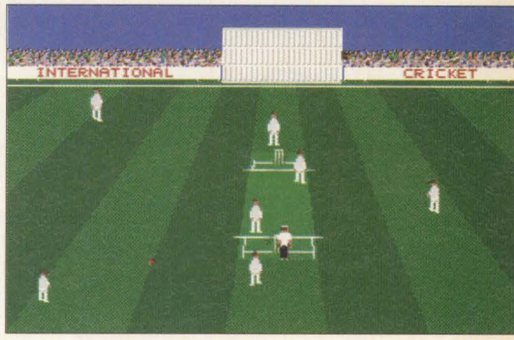
The main screen's the same whether you're batting or bowling

The graphics are a little crude but the cricketers are quite large. When you bowl you have a perspective view of the batsman nervously guarding the wickets. As you run up to the crease, a twiddle with the joystick determines the type of ball you deliver.

Batting is controlled in a similar manner. You select the type of shot with the joystick making sure it's appropriate to the ball being bowled.

Fielding is the most cumbersome to control. An arrow appears above the one of the fielders' heads. Hitting Fire cycles through the fielders and once it's above the right one he comes under joystick control. Then run into the ball and he'll automatically chuck it back to the stumps. Unfortunately, this is a frustrating process, but at least it doesn't waste any time as the 'action' freezes while you make your choice.

The main problem with *International Cricket II* is that there's so little you can do. The accompanying DOC file boasts a whole host of features that come with the registered version, but you don't even get a taster of these. The full version may well be the best thing to happen to cricket since England last won the ashes, but this version has been so cut down there is little indication whether might be the case.



Thwack! When the ball's hit, the view switches to reveal more of the pitch

IN BRIEF

Type	Shareware
Author	Paul Dowers
Requirements	1Mb • Colour • Double-sided drive
Registration fee	£7

Available from:
Paul Dowers, 181 Kings Road, Canton, Cardiff CF1 9DF

ST 48%

World Cup Cricket

Cricket fans with PCs can have their own indoor matches too, but in more of a team management role, rather than grabbing hold of a computer-generated bat themselves.

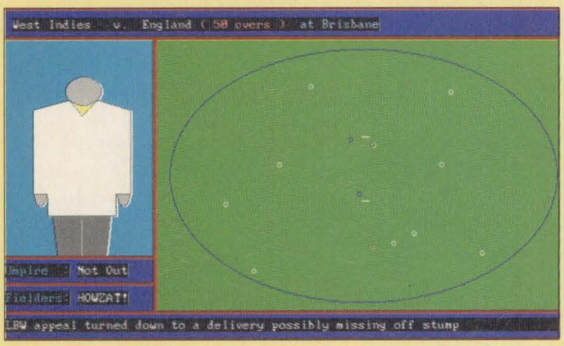
World Cup Cricket puts you in charge of the England side, and it's your job to boost the 16-player strong squad's morale to ensure that your team make it to the top of the world table. There's cricket's most sought-after trophy up for grabs, and if you don't take it home, then you'll be back with your old job at the bus depot.

Your role is in a decision-making capacity only; you choose who to put up to bat, where your fielders go and when to change bowlers. When you've made these decisions there's little to do but sit back and cross your fingers.

The 'action' is seen from a bird's-eye view. The cricketers are represented by little round blobs and so are the balls. Fortunately everything is colour-coded, so it's fairly clear what's supposed to be what.

Actually, for a game of this type, it's really presented rather well. An umpire at the side of the screen signals sixes, outs and leg byes. Plenty of information, such as what the fielders think about the decisions (but not what they think of the umpire) is also on display. The shareware version only has day one of the six-day tournament. Register and you'll be able to play all the way through to the finals. It's a pity that the author felt he couldn't release the whole game as shareware, but you'll still get quite a decent taste for the game from the freely-distributable version.

WCC is only likely to appeal to the most statistically-minded cricket head. You'll have to know the real game well to make any sense of this simulation. Management roles don't have the excitement of more interactive sports games – for the majority of people, anyway – and undoubtedly there'll be enough die-hard fans out there who'll find this game a pleasure to play.


West Indies v. England (50 overs) at Brisbane
Umpire : Not Out
Fielders: HOWZAT!
LBW appeal turned down to a delivery possibly missing off stump

After every shot is played, the umpire pops up to give you the verdict on whether or not you're out (by the way, the Ump's a b...)

The graphics are rudimentary, but for statistics fans with a passing interest in cricket, this is undoubtedly gripping stuff

IN BRIEF

Type	Shareware
Author	Mark Carter
Requirements	EGA • 256K
Registration fee	£15

Available from:
Mark Carter, 13 Chestnut Close, Amersham, Bucks MP6 6EQ

PC 75%

Quatrix

SEAL OF APPROVAL PUBLIC DOMAIN

AMIGA

Forget the mysteries of the ancient Egyptian pyramids – how on earth do you get rid of that final block...?

A load of blocks

There are ten types of block in *Quatrix*. You'd be wise to learn what they do before you start to play the game...

THE SUN – A pretty non-remarkable block. Can be transformed into Death

TIME – This one also doesn't do anything very special. Transformable into Birth

THE EARTH – Another of the 'boring' blocks, the last one. Transforms into The Heavens

THE HEAVENS – When struck by a moving block a Heaven block will expand at right angles to the direction of impact, filling every available space with a copy of the impacting block. Can be transformed into The Earth

BIRTH – When struck by any moving block Birth will fill each adjacent empty space with a replica of the impacting block. Can be transformed into Time

DEATH – When struck by a moving block Death is destroyed along with all adjacent blocks. May be transformed into The Sun

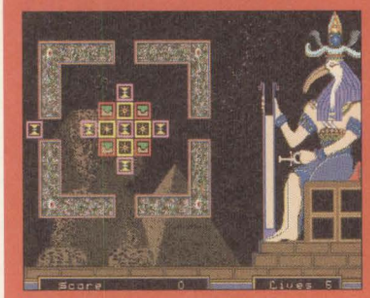
TRANSFORMATION – When struck by a moving block all blocks of a similar kind on the screen will be transformed into their alter ego... for example, if The Sun strikes Transformation, all blocks of the Sun type currently on screen will switch to Death!

THE IMMOVABLE – This block cannot be pushed, no matter however hard you might try

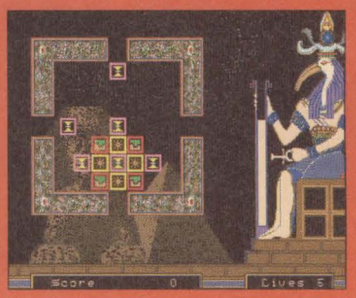
THE VOID – The first of two 'occasionally active' blocks. This block remains inert 'til centred within the playfield. When activated by crossing the central square it destroys every adjacent block. A blue marker appears over the central square when this block is present

CONVERSION – Second of the two 'occasionally active' blocks. Inert 'til centred, when active it infects every adjacent occupied block with a copy of itself. A blue marker appears to highlight the central square

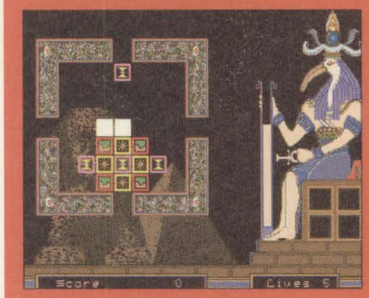
Four simple steps to being a blockbuster



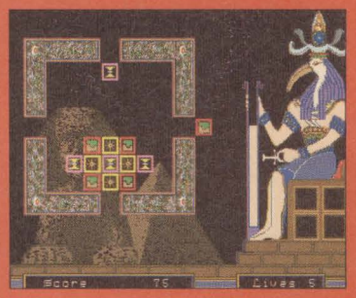
1 The incoming block can appear at any of the four gaps at the side of the screen. Here it's on the left



2 Scroll the screen around with the joystick until a matching block lies directly in the falling block's path



3 When you're lined up you can press Fire to speed things up. When the blocks make contact they flash and disappear



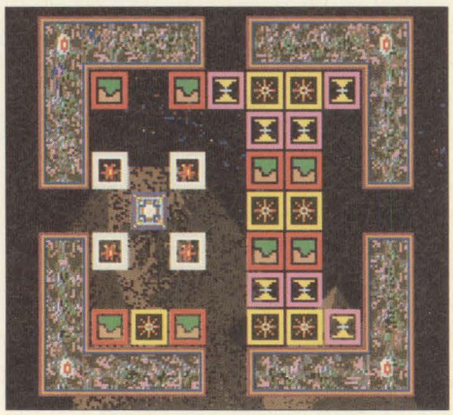
4 You get the points and get rid of the block. Another block will then appear. Repeat until the screen is cleared

Usually, when writing a game review I like to start off with a little bit about the plot, just to give you an idea of what the game's supposed to be about. Unfortunately with this one there isn't a plot to speak of, though you get the distinct feeling it might have something to do with Egyptians (lots of hieroglyphics and Sun Gods, you see).

There are two things for certain, though: one, it's a puzzle game and two, it's a darned good one.

It has elements of *Tetris* (falling blocks), and bits of *Puzznic* (match them up and they disappear). But it has lots of original little twists and innovations that make it a pretty remarkable game in its own right.

Admittedly, things aren't all that clear when you first load the game; the instruction file needs to be read from Workbench, which, for an auto-booting game is a bit of a pain. But once you get your head around the concepts involved, things soon fall into place.



***Quatrix* in action. You have a specified objective to achieve with level, and a limited amount of time in which to do it**

The game is played in a four-way scrolling playfield. Blocks drop in through gaps from all four sides of the screen and stop when they make contact with another block or reach the far side of the screen.

When one of these blocks collides with a block of the same type, the two disappear. This *only* happens when the block collides directly; when it only comes to rest to the side of an identical block nothing happens – this is very important when it comes to playing all but the simplest of levels.

You can manoeuvre the entire screen under joystick control in an attempt to get the falling blocks into the places you want them. The screen wraps around, so if you scroll to the left, anything directly at the left hand edge reappears on the right of the playing area.

The aim is to achieve an objective defined at the beginning of each level. Sometimes this is fairly simple, such as completely clearing the playing area of blocks. Other times the task is considerably more difficult, such as having to form vertical or diagonal lines. This can only be done by lining up blocks of the same type with each other, without making them disappear.

To make things even more complicated, there are certain special blocks which act in different ways when they're involved in a collision, such as wiping out all the blocks around them, or creating duplicates of the blocks that come into contact with them or transforming all blocks of one type into another.

Each level has a strict time limit within which you have to complete it. Luckily, you can speed the rate at which the blocks fall by pressing fire when you have them lined up.

Quatrix has taken the ingredients of *Tetris* and *Puzznic*, put them in a blender, added a dash of originality, and turned into a delicious feast of a game that will satisfy your appetite for puzzlers for a long time to come.

Registering the game costs 20 Australian dollars. I appreciate that registering overseas like this is a bit of hassle, but you get quite a deal for your money; another 100 levels, a level editor, the game's *AMOS* and machine language source code and, oh yes, apparently there's peace of mind included in the cost too.

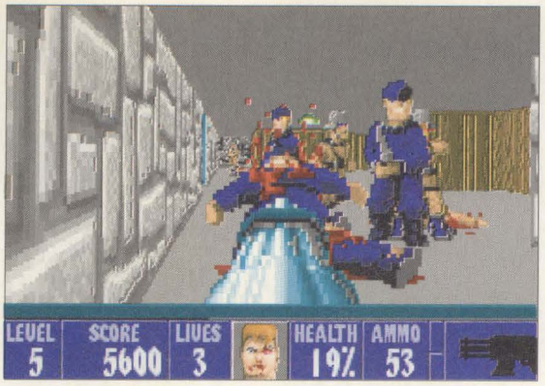
IN BRIEF

Type	Shareware
Author	Geoff Sparks
Requirements	512K
Disk number	1732
Registration fee:	AUS$20

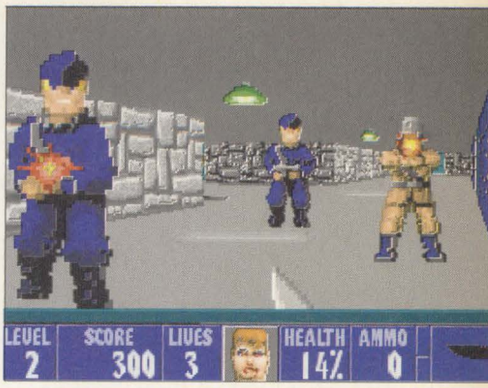
Available from:
17 Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH
☎ 0924 366982

AMIGA 90%

The evil Nazi villains don't know what's hit them. They shouldn't have been foolish enough to mess with you, should they?



Here's a message for the Führer from good ol' Uncle Sam! You're a one man Nazi-killing death machine, that's what you are



Uh oh, out of ammo and only a blunt kitchen knife for protection. Looks like your days are numbered

Wolfenstein 3D

Do you have what it takes to escape from a top security Prisoner of War camp? No, I didn't think as much...

You're a battle-hardened, cigar-chomping, high heel-wearing GI Joe. Unfortunately you're also stupid, and have managed to get yourself captured. So wotchya gonna do? Sit it out 'til the war's over – after all the food ain't bad? Like hell you are! There's only one thing for it: escape!

You start off in a prison cell, standing over the lifeless body of the guard whose skull you've just crushed with your bare hands. You now have his luger, his knife, and his bus pass. The rest is down to you...

The gameplay consists of walking around corridors and looking for the lift to get you through the eight levels of the fortress-cum-prison. As you go you have to make your way through doors – lots of them. The problem with doors is that you're never quite sure what's going to be on the other side. It might be a tasty supper of chicken and chips with a salad garnish, on the other hand it could be one of Hilter's little helpers waiting to give you a lead-flavoured treat....

In fact there are plenty of Jerries lurking 'round the corners, along with their savage hounds that would prefer a chunk out of your neck to a bowl of Chum any day. It's wise to proceed cautiously, with your finger in the trigger (or CTRL key, to be more precise). Every time you get hit, your strength is depleted. Should it hit zero then it's time to call in the Priest. Luckily there's food scattered fairly liberally about the place which magically heals your wounds.

Wandering around the corridors can be a little disorientating. If you need to get back to where you know some grub is you can often retrace your steps by following the trail of carnage that you've left behind. It's a bit like the trail of bread crumbs in the Hansel and Gretel story, the difference being that the corpses don't get cleaned up.

Wolfenstein 3D is gob-smacking and Mike Tyson's wearing the boxing gloves. It uses a technique the programmers proudly call 'texture-mapped 3D'. And right they are to be chuffed with themselves; what it means is that the game world is displayed as a 3D environment where graphic images are mapped on to walls and objects are displayed in increasing detail as you get closer to them.

The graphics look excellent, maybe a little too excellent. Games where you walk round killing people are nothing new, but here the effects are so realistic that you almost feel sorry for the bad guys as they lie there in a pool of texture-mapped blood.

The presentation is superb and drips with more quality than the mayonnaise in a Marks and Spencer's cheese salad sandwich. There's a choice of skill levels at the beginning of the game, rated from 'Daddy, Can I Play?' to 'I Am Death Incarnate!' An accompanying graphic changes accordingly, ranging from the 'hero' with a bonnet on his head and dummy in his mouth to a completely insane, salivating, possessed-by-the-demons-from-hell type of character.

Technically, then, the game surpasses anything this side of NASA's research labs, the game has a superb atmospheric feel too – it really is frightening walking into a crossroads in a corridor – though when all's said and done there's little to actually do; waste the fascist scum and roam the corridors looking for the way out.

Registration may seem a little steep, amounting to over £30 when you include the VAT and postage, but this really is the highest quality. You receive the next two games in the series, and if you're feeling really flushed you can also buy another set of three games.

Wolfenstein 3D is a top-quality game, whatever standards you judge it by. You'd be a fool to miss out on the shareware version at least.

Commercial breaks

Does *Wolfenstein 3D* match commercial products in terms of game quality? Several major US software houses happen to think so. Electronic Arts, Origin and Sierra all expressed an interest in publishing the game.

The team behind it, ID Software, stuck to its guns and has released the game through Apogee, which has also marketed the team's other products – including the *Commander Keen* games – as shareware .

The graphics in *Wolfenstein 3D* are truly amazing. As you get closer you see things in more and more detail

Is your PC hard enough?

***Wolfenstein 3D* is technically a very advanced program and requires some pretty beefy hardware to enable it to run. Don't even think of getting hold of this game unless your PC is a 286 equipped with a hard drive, a 256-colour VGA graphics card and a megabyte of memory at the very least. The faster your machine the better.**

And if you have other bits of hardware then even better. The program has options to work with a mouse, joystick or Gravis GamePad and will also pump out some pretty stunning sonics with the Adlib, the Soundblaster and the Disney Sound Source add-on cards.

IN BRIEF

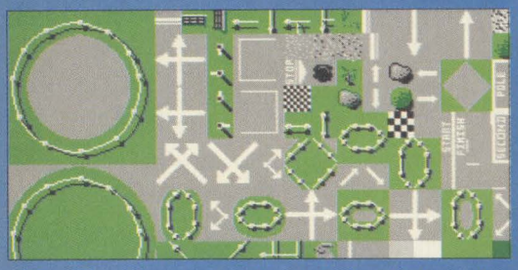
Type	Shareware
Author	ID Software/Apogee
Requirements	Hard drive • 1Mb • 286 256 colour VGA Supports soundcards
Registration fee	£36

Available from:
Nildram Software, 26 Stanley Hill Avenue, Amersham, Bucks HP7 9BD
☎ 0494 432342

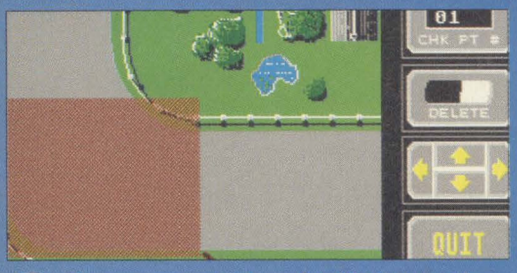
PC 96%

On the right track

The built-in editor enables you to design your own tracks. As well as actually placing the background graphics that make up the details, you need to set the cars' starting positions, the circuit they must take to complete a lap and the routes for the computer-controlled cars to take. Only then can the race begin!

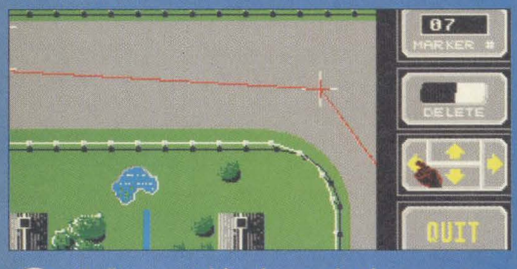


1 The tracks are made up from a selection of background graphics. These are selected from two screens full of assorted graphics and laid down on a screen four times larger than can be displayed. The designer's easy to use, but to start with it's best to alter an existing track to get the feel of things



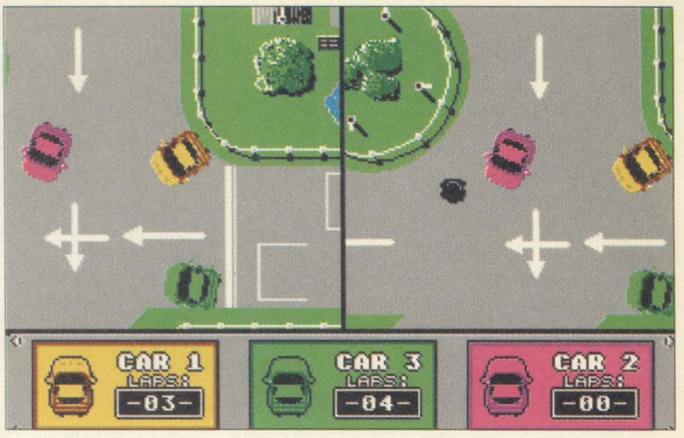
2 Once your masterpiece is complete, it's time to set the course that the cars must take in order to complete each lap. Up to 31 markers are available, which must be placed in the correct order. Drag a box over the area that the cars must pass through in order for it to count towards a complete circuit

3 Next set the starting position for each of the cars. Each car can be given an independent starting point, so you can put your enemies at the back if you're a dirty rotten cheat! You can also rotate the orientation of the cars for tracks which start on a corner (or if you want them to have to turn around!)



4 Finally you must define the route that the computer's drone cars take. Ensure that you don't set routes that send them crashing into the side of the track! There are 31 markers available and the computer cars drive in straight lines between each of the markers in the order you place them down

Seat belts on, clutch out and band aids at the ready. Get set for the race of a lifetime where there are no holds barred and no bars to hold on to...



Uh oh, we're heading for a multi-car pile up on the road to Hull! (That should be Hell, surely?)

Hotwheels

The sound of revving engines fills the air. The crowd waits expectantly. The lights turn green, there's a screech of burning rubber and they're off. It's the start of another gruelling race...

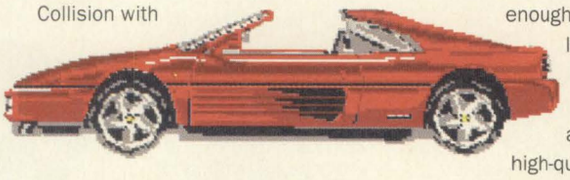
Hotwheels puts you in the driving seat of a racing car and you're up against a couple of other cars that compete for pole position. You have a number of laps to complete and the first past the chequered flag is proclaimed the winner.

One or two players can take part in the event, the computer taking care of the remaining cars. The controls are simple – steer left, right and accelerate – but it all adds up to a game where skill is needed to negotiate the courses successfully. The cars have inertia. That is, when you take your foot off the pedal (or finger off the fire button) the car doesn't stop dead, but slams into the side of the road (or hapless pedestrian) instead. You have to slow down for corners as you slide round them, picking up speed as you pass them. And don't forget to use your rear-view mirror and indicators, and don't sound your horn in a built-up area after 11pm.

Luckily the vehicles are rather robust and can take the punishment of hitting crash barriers at high speeds. You simply bounce off them rather than needing to be cut out of the wreckage by firemen equipped with oxyacetylene torches.

Collision with other cars is a similarly bruise-free experience and the cars just knock each other about a bit rather than needing a new front-end. This is where a large amount of the game's playability stems from. If an opponent's car is slowing down for a corner, give 'em a rear-end shunt, to send them hurtling into the crash barrier, while you lose enough momentum to take the corner easily. In fact, this can turn into such a vendetta that the goal of winning can soon be lost in favour of getting one up on your opponent.

The track that you race on is larger than can be displayed on the screen.



In a one-player game the whole screen scrolls rapidly and smoothly around your vehicle, the computer-controlled cars appearing when their position on screen puts them close to you.

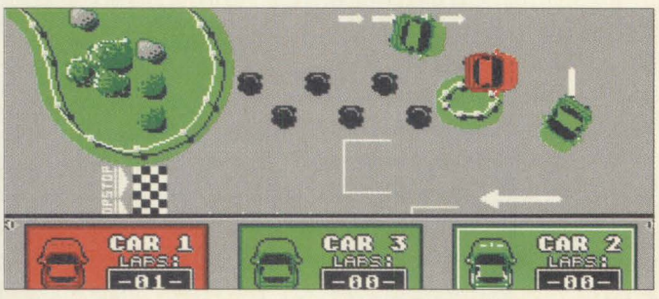
The best fun is to be had with two players, though. Here the screen is split vertically, providing a smaller area for each car, but this is more than made up for by having a real human chum with whom to do battle.

The action is viewed from above, giving you a bird's eye view of the cars and track. Although the graphics aren't stunning, the cars are depicted well enough and the backgrounds look suitably racetrackish. The scrolling is very smooth and gives the game a high-quality feel.

There are 15 tracks to test your skill. Should you tire of these then there's a complete level designer where you can construct the ultimate death race with hair-raising hairpins and sickening chicanes.

The only things which let *Hotwheels* down are the lack of any pick-'em-ups to beef up the power of your cars and the fact that you don't really have any feeling of progression as you move on to different tracks – each one becomes just another, albeit more difficult, race.

But it's exceptionally well-programmed and great fun all the same. Get out of my road!

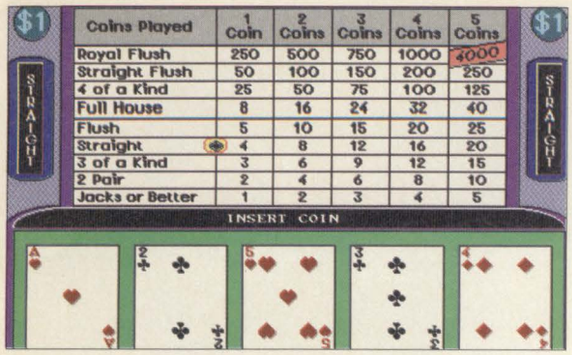


In the one-player game the whole screen scrolls and you race two computerised cars

IN BRIEF

Type	PD
Author	John Gymer
Requirements	Any ST
Disk number	G035
Available from:	PD4U, 4 Sintonville Avenue, Belfast BT5 5DG

ST 88%


Coins Played
1 Coin
2 Coins
3 Coins
4 Coins
5 Coins
Royal Flush 250 500 750 1000 4000
Straight Flush 50 100 150 200 250
4 of a Kind 25 50 75 100 125
Full House 8 16 24 32 40
Flush 5 10 15 20 25
Straight 4 8 12 16 20
3 of a Kind 3 6 9 12 15
2 Pair 2 4 6 8 10
Jacks or Better 1 2 3 4 5
INSERT COIN

Is the mix of Poker and the slot machine the perfect combination? Well, it's alright but could do with a bit more on the gameplay side...

You can hold as many cards as you like by pressing keys 1-5, here we're hoping for a two so that we can win some big money. Fingers crossed...

Video Draw Poker

Slot machines are rivalled only by card games as the most popular form of gambling around, so what better idea than combining the two into a video simulation of a coin-operated poker game? You won't even lose any real money – then again, you won't actually win any either.

This, surprisingly, is exactly what happens in *Video Draw Poker*. You have to win as much dosh as you can in a limited amount of time.

You start the game with absolutely no money whatsoever. This is no problem as this slot machine is the only one I've ever heard of that gives you credit. Maybe it gives you a week to settle your debts and comes round with the boys and breaks your knee-caps when you don't pay up as well.

The game is played along the lines of Poker. You're dealt five cards and then may elect to choose to keep any number of them before you're re-dealt another hand. It's after this second batch that your winnings are calculated (or, more often than not, another coin disappears from your kitty).

You can choose to bet from one to four coins. A chart tells you the amount that the various winning combinations will net you. You need a pair of Jacks or higher to win your money back. Two pairs doubles your dosh, the big money comes when you get to the straights, flushes and so on.

You place your bets before you actually get to see any of the cards you're dealt, so there's no real indication to suggest how many coins you should insert apart from how lucky you're feeling. In fact, there's very little skill involved apart from deciding what cards you should keep; there's no real system for gambling, raising the stakes or bluffing which, really, are pretty essential ingredients for a Poker-type game.

The graphics are great – the cards are clear and everything is fairly straightforward. There are a number of options to customise the game slightly but these are all fairly minor and don't really change the way the game is played to any degree.

What we have here is a very nice-looking game that's been quite well put together, but is a little bit dull to play. It takes ages to actually win anything amounting to a decent stash of cash, and when you do, it's much more down to luck than any amount of skill on the player's part.

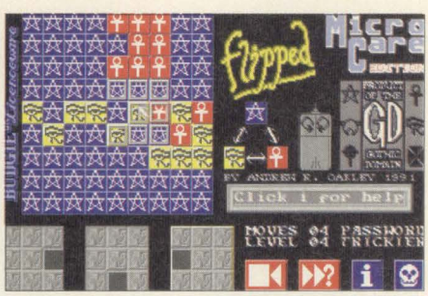
IN BRIEF

Type	Shareware
Registration fee	$20 (£12)
Author	Raymond Buti
Requirements	640K • EGA • Hard disk or high density drive
Available from	Testware, 46 The Avenue, Harrogate, Yorkshire HG1 4QD ☎ 0423 886415

PC 74%

Flipped

It's time to but your brainy head on, 'cos *Flipped* is one of those game that requires mental dexterity, rather than rapid fire-button pushing power.



The idea is to make the tiles all the same colour, but we've messed it up good and proper!

You're presented with a grid of nine-by-nine squares consisting of three different types of symbols. The idea is to flip them round so that they all end up the same colour. Succeed and you move on to the next level.

The flipping of the tiles is done with the aid of three templates at the bottom of the screen. Pick up a template with the mouse, drag it to the area you want to flip, and all the tiles under it will be changed around according to the mouse button you press; a right click cycles them clockwise, a left click anti-clockwise.

The first levels are straightforward enough and it's fairly obvious which templates you have to use to complete them. Things get trickier later on, with lots of thinking (or random clicking) required before you get it right.

Passwords are given for each level, so you don't have to solve the same ones over again. There are 100 levels to play through, so it should keep you occupied for quite some time. Not bad at all for those who prefer brain power to fire power.

IN BRIEF

Type	Licenceware
Price	£3
Author	xxx
Requirements	512K
Disk number	BU91ST
Available from	Riverdene PDL 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 0734 452416

ST 79%

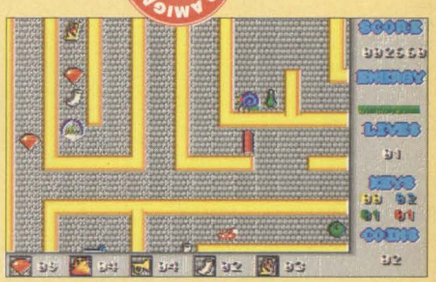
Marvin the Martian

Marvin's in a bit of bovver. He's only gone and got his spaceship stuck in some kind of weird time warp thingy. It's up to you to get him out again.

The problem is that he's not alone. There are plenty of non-Martian-type-aliens lurking around who all reckon that Marvin sandwiches are the best thing since synthetic bread.

To escape you must collect a number of objects (don't ask why) that have been scattered around the maze-based playing area. There are many locked doors around and to get through them you'll need to find the correct colour-coded keys. As a defence against the baddies, you can cough out a patch of oil which they definitely aren't so keen on.

The maze is several times the size of the Amiga's screen and scrolls as you near the edge. It runs quite slowly, though, and it can be frustrating manoeuvring around the place. The graphics are nice enough, but the gameplay's pretty shallow and it's not one to get you hooked.



Marvin's the dude in the little UFO. He has to collect loads of items to get off screen

IN BRIEF

Type	Licenceware
Price	£3.50
Author	xxx
Requirements	1Mb
Disk number	LPD49
Available from	Déjà Vu, 25 Park Road, Wigan, Lancs, WN6 7AA ☎ 0942 495261

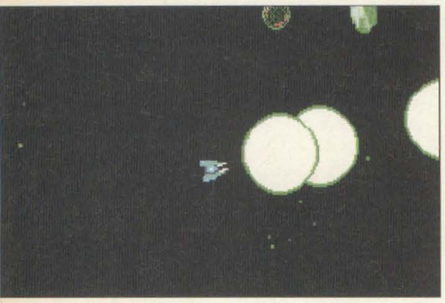
AMIGA 68%

E-Type

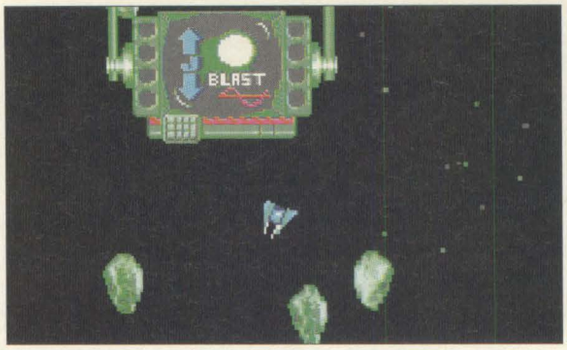
Oh my God, it's full of rocks! You're stranded in outer space with only a laser cannon and a load of asteroids to keep you company. Your only hope of salvation is to blast the rocks into tiny little pieces; should they make contact with you then they're going to do more than damage your paintwork or cause a nasty unsightly scratch.

E-Type is not a shoot-'em-up in the *R-Type* mould as you might expect, but a strange asteroids-style game with knobs on. As well as keeping out of the road of rocks there are collectable things floating around that are rather a good idea to get hold of, because they do things like change your weapon power and, most importantly, get you the hell out of there...

...Only, unfortunately, as far as the next level, where there's even more mayhem to face. Here, alien ships add to the 'fun', though they don't actually do anything you'd rightly expect them to do such as shoot you or try kill you in any way (bar collision with them, that is). They are effectively exactly the same as the asteroids, only a good deal bigger.



My, what big shots you've got. All the better to blast you into space dust



Bump into a power up and choose something from the Weapons TV

Your asteroids cannot harm me, do your worst, alien rock scum

There's just one type of power-up that lets you select between a number of options from a 'Weapons TV' that appears in the middle of the screen. You can chose between an extra life, various types of more powerful shot, and a shield that plants a ring of mines outside the perimeter of your ship, destroying anything that should be foolish enough to come close. (Not that an inanimate object such as a rock can have the characteristics of being foolish, but there you are.)

To get off the level you need to collect a number of bubbles and diamonds that zoom through space. Here's the problem: it's easy enough to sit still and let these come your way, but it takes ages and it's boring.

The alternative is to actively pursue them which is a lot quicker and more interesting, but certain to reduce your life expectancy. This is because though the rocks move slowly, when you shift you really do motor. Also, the momentum is be a bit dodgy and doesn't have quite the right feel to it.

The graphics are nice enough, the sound's OK, but the gameplay, sadly, is a bit on the flawed side.

IN BRIEF

Type	Shareware
Registration fee:	£5
Author	Matt Hall
Requirements	512K
Disk number	1930

Available from
17-Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH
☎ 0924 366982

AMIGA 71%

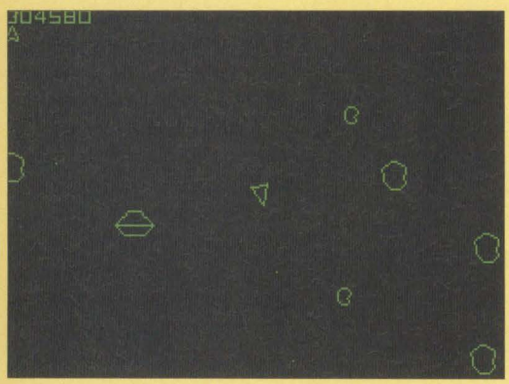
Asteroids

The old ones are the old ones, but they're also the classics. *Asteroids* is a faithful clone of the Atari arcade smash of 1979. *Asteroids* games are nothing new on the ST (check out the arcade games round-up last issue – it's a pity that this was a little too late for that feature; believe me, if it had got here in time it would have achieved top billing).

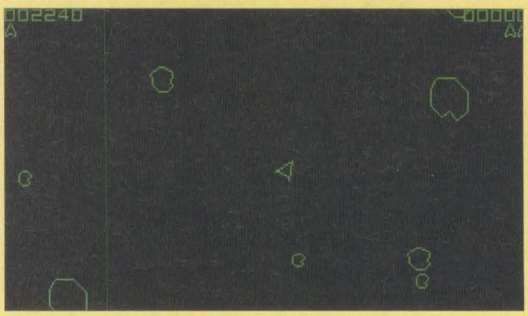
The first thing that hits you is the program's posh presentation. For a start, you're given the choice of five languages in which the game prints its text; English, French, Dutch, Italian and Spanish are all supported. They seem to work too – I couldn't understand a single word when I choose any other option from the menu apart from English.

Then the obligatory 'the-world-would-be-a-nicer-place-if-everyone-paid-their-shareware-fees' message comes up and then it's into the game proper.

It's a near-perfect copy and captures the feel of the original extremely well. The pace of the game, inertia system and vector graphic-style display complete the illusion; you *are* back in the corner of a dingy arcade 12 years back. There are one- or two-player options (the two taking it in turns), those devious little enemy spaceships that come out of nowhere and shoot you just when you thought you had the last asteroid licked, and, oh yes, lots of rocks too. Ahh, those indeed were the days...



The UFO is coming to get you. Take care of it with a well-aimed shot before it does the same to you



Asteroids is a faithful clone of the arcade classic. The gameplay has exactly the right feel and it even looks the same

The thing that brings you back to the 1990s is the slick presentation. Take the high score table for example. It's not simply a case of tapping in the three initials of your name; instead you have to shoot them to enter them. Very clever, but incredibly difficult to hit the correct letters! It can take ages to input your name, even if it's only Bob.

Music plays through all the menu screens, but it's good(?) old asteroids noises when you play the game proper. The graphics do look a wee bit dated, but then again they would, wouldn't they...?

For the £5 registration fee you're guaranteed the next game released by the authors. Bung a tenner their way and you'll get the game's source code so techie types can try and fathom out just how they did it. Do yourself a big favour. Send off the dosh and buy yourself a slice of gaming history.

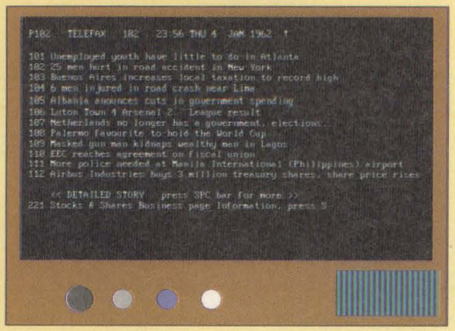
IN BRIEF

Type	Shareware
Author	Sinister Developments
Registration fee:	£5
Requirements	512K • Colour

Available from
Sinister Developments, 16 Downfield Place, Edinburgh EH11 2EL

ST 90%

Airline


P102 TELEFAX 102 23:56 THU 4 JAN 1962
101 Unemployed youth have little to do in Atlanta
102 25 men hurt in road accident in New York
103 Buenos Aires increases local taxation to record high
104 6 men injured in road crash near Lima
105 Albania announces cuts in government spending
106 Luton Town 4 Arsenal 2 - League result
107 Netherlands no longer has a government, elections
108 Palermo favourite to hold the World Cup
109 Masked gun men kidnaps wealthy man in Lagos
110 EEC reaches agreement on fiscal union
111 More police needed at Manila International (Philippines) airport
112 Airbus Industries buys 3 million treasury shares, share price rises
<< DETAILED STORY press SPC bar for more >>
221 Stocks & Shares Business page Information, press S

The news page yields important information that you can use to make financial desicions about your airline

I always wanted to be an engine driver when I grew up, but fortune didn't smile upon me, and I ended up as chairman of British Airways instead, hmmph! Nothing ever goes the way you plan it.

Airline puts you in the decision-making chair of one of the world's largest airlines. Your job is simple: make money. This is done by buying some airplanes, selecting your flight routes, setting ticket prices plus a few other assorted factors that affect the profitability of a major commercial airline.

In fact, although the game is based on carrying paying passengers to and fro, it has more to do with economics than anything. It reminds me of the game where you're a lemonade seller, and have to buy in ingredients and fix prices depending on the weather.

As such, it isn't the most exciting of games. It's primarily text-based, though it does have a few prettied up graphical screens such as the world map displaying air routes.

It may have uses as a teaching aid, but isn't going to keep you up into the early hours to see if flight BA1274 will turn in a profit or not.

IN BRIEF

Type	Shareware
Registration fee	£7
Author	S Rooney
Requirements	512K • CGA

Available from
S Rooney, 4 Windmill View, Tiptree, Essex C05 0PL ☎ 0621 819378

PC 67%

Game Tamer

The mark of a good game is that it keeps you at it for ages. The one way to spoil a good game is to get a cheat for it, finish it that evening, and never play it again.

This disk is crammed full of cheats for tons of games covering just about every type you can think of – there are nine pages each containing 33 underhand ways of getting your name to the top of the high score table. That's, um, 297 in total! They're all for commercial offerings, you *do* have some commercial games, don't you?

Page 5 GAME TAMER V2.3 - by Gary Henderson
Leatherneck | Lemmings - Mayhem | Metal Masters
L.E.D. Storm | Lemmings - Mayhem (2) | Metal Masters
Legend of the Lost | Leonardo | Mickey Mouse
Leisure Suit Larry | Line of Fire | Midnight Resistance
Lemmings - Tip | Logical | Monty Python
Lemmings - Fun Level | Lotus Esprit | More Lemmings - Jane
Lemmings - Fun Level (2) | Lotus Esprit 2 | More Lemmings - Crazy
Lemmings - Tricky | Lotus Esprit 2 (Part 2) | More Lemmings - Wild
Lemmings - Tricky (2) | Magic Marble | More Lemmings - Wicked
Lemmings - Taxing | Manic Miner | Narc
Lemmings - Taxing (2) | Maria Whittakers Xmas Box | Narco Police
1 2 3 4 5 6 7 8 9 About Greets Printer : OFF
GAME TAMER V2.3
Written by Gary Henderson, Using AMOS Basic V1.3.
This Program is 100% Public Domain Software.

Cheating made easy. Game tamer has information for getting the better of hundereds of games

Some games have several cheats listed for them. *Lemmings*, for example, has cheats for various levels.

The cheats are in a similar format to those that appear in computer magazines – passwords, tips and those sneaky cheats that programmers build in precisely so that someone will find them, send them into a magazine and give the game a little publicity.

The cheats are arranged in alphabetical order and can be selected by clicking on them. The info appears in a panel at the bottom of the screen and can be printed out so that you don't have to scribble out all 150 passwords or whatever.

If you're an underhanded, low-life, good-for-nothing cheat, chances are that there will be a cheat or two for something in your disk box.

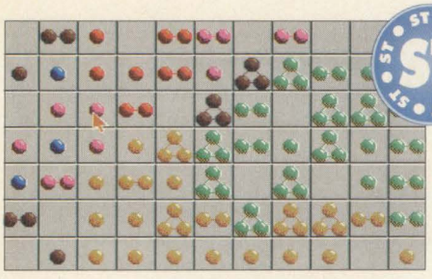
IN BRIEF

Type	PD
Author	Gary Henderson
Requirements	512K
Disk number	MCU 89

Available from
MCPD, 6 Colchester Road, Prittlewell, Southend on Sea, Essex SS2 6HP
☎ 0702 351941

AMIGA 76%

Chain Reaction



Up to six players, a mixture of computer-controlled and human, can take part in *Chain Reaction*

Chain Reaction is based on a game that's been around in various forms for quite a while. The idea is to place atoms on a playing area divided into squares. When a square contains more atoms than it can hold, they explode into neighbouring areas, adding one to the atom count in those squares and possibly setting the whole process off again. This can lead to chain reactions reaching all over the board.

Up to six players can take part, any of which can be played by the computer. When there is only one player left, it's game over and they're declared the winner.

The computer players don't seem particularly gifted in the intelligence department and tend to wipe out one another fairly quickly. The problem with this sort of game is that a single move can change the whole balance of the game, and it's very hard to think the number of moves ahead required to work out any kind of strategy.

It's well done, though, with nice-looking graphics, good effects and even some digitised speech that actually sounds quite human. It's probably the best of this type of game that the ST has to offer, if you want this type of game, that is.

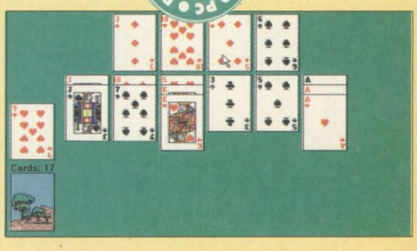
IN BRIEF

Type	Shareware
Registration fee	£5
Author	Steve Taylor/Colin Whitehead
Requirements	512K • Colour

Available from
Stephen Taylor, 3rd Floor Left, 11 Aberfeldy Street, Dennistown, Glasgow G31 3NS

ST 70%

Calculation Solitaire



***Calculation Solitaire* is a good variation on the patience card game theme, it's friendly too**

There have been plenty of solitaire games available for the PC, and here's another one. The difference is that it runs under Windows.

It plays a variation on the theme, where the four piles of cards ascend in value in differing amounts, so that pile one has to be built up Ace, One, Two; pile two starts Two, Four, Six; the third pile goes Three, Six, Nine; the fourth pile in steps of four.

The four starting cards are already in place and the rest are in a deck from which you have to deal. There are a number of spaces that can be used to store cards waiting to be used, though you have to use them intelligently, otherwise you'll play yourself into a corner.

It's a friendly game and there's lots of help; if you're not sure which card goes next on a pile a mouse click will bring up the info for you.

It's hardly the most amazing of games, but if you want to while away an hour while you should be working, then it's not a bad way of doing it.

IN BRIEF

Type	Shareware
Author	Daniel Thomas
Requirements	Windows • Hard drive • 640K • EGA
Registration fee	$15 (£8)

Available from
SMS Shareware, 19 Corshalton Rd, Camberley, Surrey GU15 4AQ
☎ 0246 681864

PC 77%

The best of the rest • The best of the rest • The best of the rest

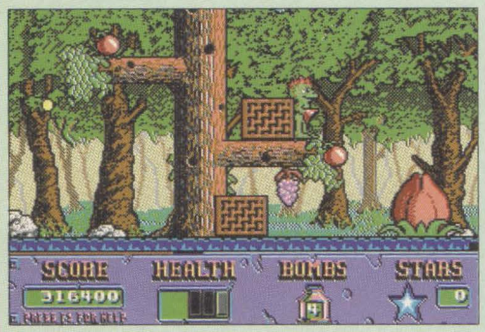
Still sceptical that PD and shareware games can be every bit as good as full-priced games? Well here's the proof. Check out any of these games, they're the ones that have gained the best scores over our first seven issues, and we guarantee you won't be disappointed...

PC

❶ Cosmo's Cosmic Adventure — Issue 7 — 97%

SMS Shareware, 19 Corshalton Road, Camberley, Surrey ☎ 0246 681864

OK so its a rip-off of *Sonic the Hedgehog*, but who cares? *Cosmo's Cosmic Adventure* is the most fun you're ever likely to have on a PC. Essential gaming.



Platform action par excellence on too many levels to count

❷ Commander Keen 4 — Issue 3 — 96%

PSA, 10 High Street, Tadlow, Royston, Herts SG8 0ES ☎ 0767 23302

The second series of *Commander Keen* games. Can you save the galaxy single-handedly? Great graphics and loads of surprises.

❸ Duke Nukem — Issue 2 — 94%

PSA, 10 High Street, Tadlow, Royston, Herts SG8 0ES ☎ 0767 23302

Huge platform game. Enter the evil dictator's fortress and teach him a lesson he'll never forget. Plenty of things to see and destroy.

❹ Paganitzu — Issue 4 — 92%

PSA, 10 High Street, Tadlow, Royston, Herts SG8 0ES

Multi-level all-action thrills inside a pyramid. Collect diamonds and avoid venom-spitting snakes. Great graphics, great puzzles.

❺ Hugo's House of Horrors — Issue 1 — 92%

Classic Shareware, 23 Fieldhead Close, Pontefract WF8 2ED ☎ 0977 794876

Brilliantly funny adventure game where your animated character mimics your actions on-screen as you type them in. He walks, he talks and he dies a lot too.

❻ Monuments of Mars — Issue 2 — 88%

PSA, 10 High Street, Tadlow, Royston, Herts SG8 0ES ☎ 0767 23302

Arcade game set on the red planet that's packed with puzzles. You'll die plenty, but there's unlimited lives so you can keep on going for ever...

❼ Domination — Issue 6 — 85%

Testware, 46 The Avenue, Harrogate, North Yorkshire ☎ 0423 886415

A tiles-on-a-grid puzzle in which one move can lead to a massive chain reaction.

❽ Captain Comic — Issue 2 — 85%

Eigen PD, PO Box 722, Swindon SN2 6YB ☎ 0793 611270

This is one big game. Your superpowers are limited, but there are lots of things to pick up to make them better. Cartoon graphics add to the atmosphere.

❾ Ground Wars — Issue 1 — 85%

Advantage, 56 Bath Road, Cheltenham, Glos GL53 7HJ ☎ 0242 224340

Two-player warfare game based in the Gulf. You have to take apart your opponent's tanks and military targets before they do the same to you.

❿ Fiddle — Issue 6 — 84%

SMS Shareware, 19 Corshalton Road, Camberley, Surrey ☎ 0246 681864

You have a set of geometric shapes that have to be fitted together to form a square. 26 different puzzles, a time limit and add scoring system all add to the fun.

ST

❶ Llamatron — Issue 1 — 96%

Llamasoft, 489 Mount Pleasant, Tadley, Hants

Manic blast with hundreds of levels and even more llamas! Kill all manner of unlikely enemies to progress through the levels. It's weird, wacky and, quite simply, wonderful!

❷ Ozone — Issue 3 — 94%

Goodman Enterprises, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW ☎ 0782 335650

Brilliant-looking arcade game with playability to match. Can you get your round-but-cute blob to the exit safely? Oh-so-cute graphics complement the gameplay.

❸ Violence — Issue 7 — 93%

Martin Barlow, 33 Torr Vale Road, Newmills, Stockport, Cheshire SK12 3HS

Vertically-scrolling space-based dogfight blast-'em-up of the highest calibre.

❹ Douglas Rockmoor — Issue 1 — 91%

LAPD, 80 Lee Lane, Langley, Heanor, Derbys DE7 7HN ☎ 0773 761944

Boulderdash clone that's more fun than Christmas. It's slightly spoiled by slow scrolling that doesn't keep up with the action, but what the heck, it's fun!

❺ Penguins — Issue 4 — 90%

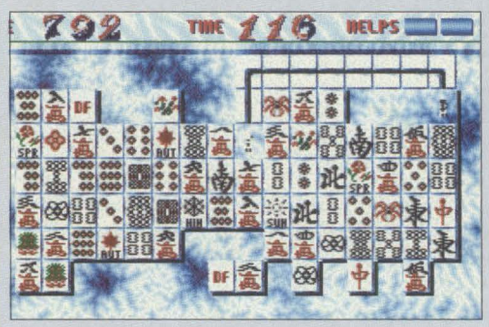
Goodman Enterprises, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW ☎ 0782 335650

A mixture between *Pipemania* and *Lemmings*, you have to guide hapless penguins to the exit by dropping obstacles or bridges in their path.

❻ Match It — Issue 5 — 89%

New Age PDL, 30 Anderson Estate, Lower Road, Hockley, Essex SS5 5NG

Mahjong variation number 2,089, but this one has a couple of neat twists and a superb visual presentation, making it one of the best, and the most addictive.



***Match It* is an excellent variation on the Mahjong theme**

❼ The Mystic Well — Issue 2 — 88%

Riverdene, 30a School Road, Tilehurst, Reading RG3 5AN ☎ 0734 452416

Dare you dare the depths of *The Mystic Well*? 3D hack 'n' slash game, in the style of the full-priced classic *Dungeon Master*, that will keep you going for ages.

❽ International Cricket — Issue 6 — 87%

Riverdene, 30a School Road, Tilehurst, Reading RG3 5AN ☎ 0734 452416

Great little cricket sim which pits eight top international teams against each other in a series of day and test matches. Unusual but handy joystick/mouse control combination.

❾ Dizzy Lizzy 2 – A Winter's Tale — Issue 4 — 86%

Caledonia PDL, 250 Oldtown Road, Hilton, Inverness ☎ 0463 225736

A *Boulderdash*-esque puzzle game where you have to control a small round blob – the eponymous hero – and find crackers, pressies and Christmas pud.

❿ Revenge of the Mutant Camels — Issue 4 — 84%

Merlin, 11 Grange Close, Minchinhampton, Glos GL3 9DF ☎ 0453 882793

The latest creation from weirdo Jeff Minter, *Mutant Camels* is an all action romp very much in the blast-everything vein of *Llamatron*.

Amiga

❶ Llamatron — Issue 1 — 96%

Llamasoft, 489 Mount Pleasant, Tadley, Hants

The classic ST game is also available on the Amiga. Blast coke cans, telephones, toilets and stranger things with your death-spitting llama.

❷ Doody — Issue 7 — 94%

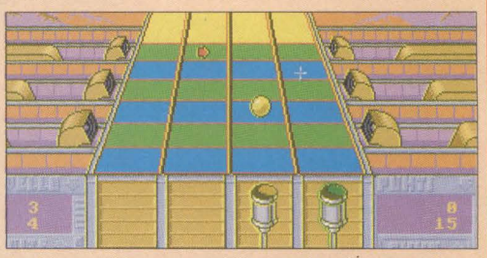
Start Computer Systems, Barbican House, Bonnersfield, Sunderland SR6 0AA ☎ 091-565 2506

Based on the arcade classic *Mario Brothers*, *Doody* features two blobs leaping around platforms and getting rid of nasties. Brilliant animation and great fun.

❸ Hypnotic Land — Issue 2 — 94%

Déjà Vu, 25 Park Road, Wigan, Lancashire WN6 7AA

Put the correct-coloured balls into the right cups as they roll down a conveyor belt. Starts off easy, but soon gets very tricky indeed. It's bodacious, dudes!



Simple concept, but engrossing gameply, that's *Hypnotic Land*

❹ Super Amidash — Issue 2 — 94%

Amiganuts, 169 Dale Valley Road, Holybrook, Southampton SO1 6QX ☎ 0703 785680

Boulderdash clone that has everything the original had and a lot more to boot. A lot of the levels are the same, but there's plenty of new ones to challenge you. Unmissable!

❺ Lemmingoids — Issue 6 — 91%

GSPD, 46 Weller Drive, Camberley, Surrey GU15 2YA

Lemmings meets *Asteroids*. Blow up the flying rodents using an umbrella. Great graphics, great gameplay, great comic appeal. Do not miss it.

❻ Revenge of the Mutant Camels — Issue 5 — 91%

Llamasoft 49 Mount Pleasant, Tadley, Hants ☎ 0734 814478

Camels and goats do battle with phone boxes and mad Jeff Minters. It's mad, it's loony and it's action all the way in the latest from Llamasoft.

❼ Cabaret Asteroids — Issue 1 — 90%

Software Expressions, Hebron House, Soin, Bedminster, Bristol ☎ 0272 637634

Carbon copy of possibly one of the finest arcade games ever. Blast the rocks to pieces or they'll do the same to you. More playability than many more modern games.

❽ Amigoids — Issue 1 — 90%

Software Expressions, Hebron House, Soin, Bedminster, Bristol ☎ 0272 637634

Another *Asteroids* clone. Just as playable but with souped-up graphics and a few new twists. The only problem is: which one do you choose?

❾ Cyad — Issue 1 — 90%

Déjà Vu, 25 Park Road, Wigan, Lancashire WN6 7AA

Not technically brilliant, but it's one of those games that just works. Gobble all the diamonds on the screen to complete the levels.

❿ Seven Tiles — Issue 1 — 90%

NBS, 132 Gunville Road, Newport, Isle of Wight PO30 5LH ☎ 0983 529594

Fast and furious footie sim set in the next century. Pretty much ignores all the rules of conventional soccer, which is probably why it works so well.

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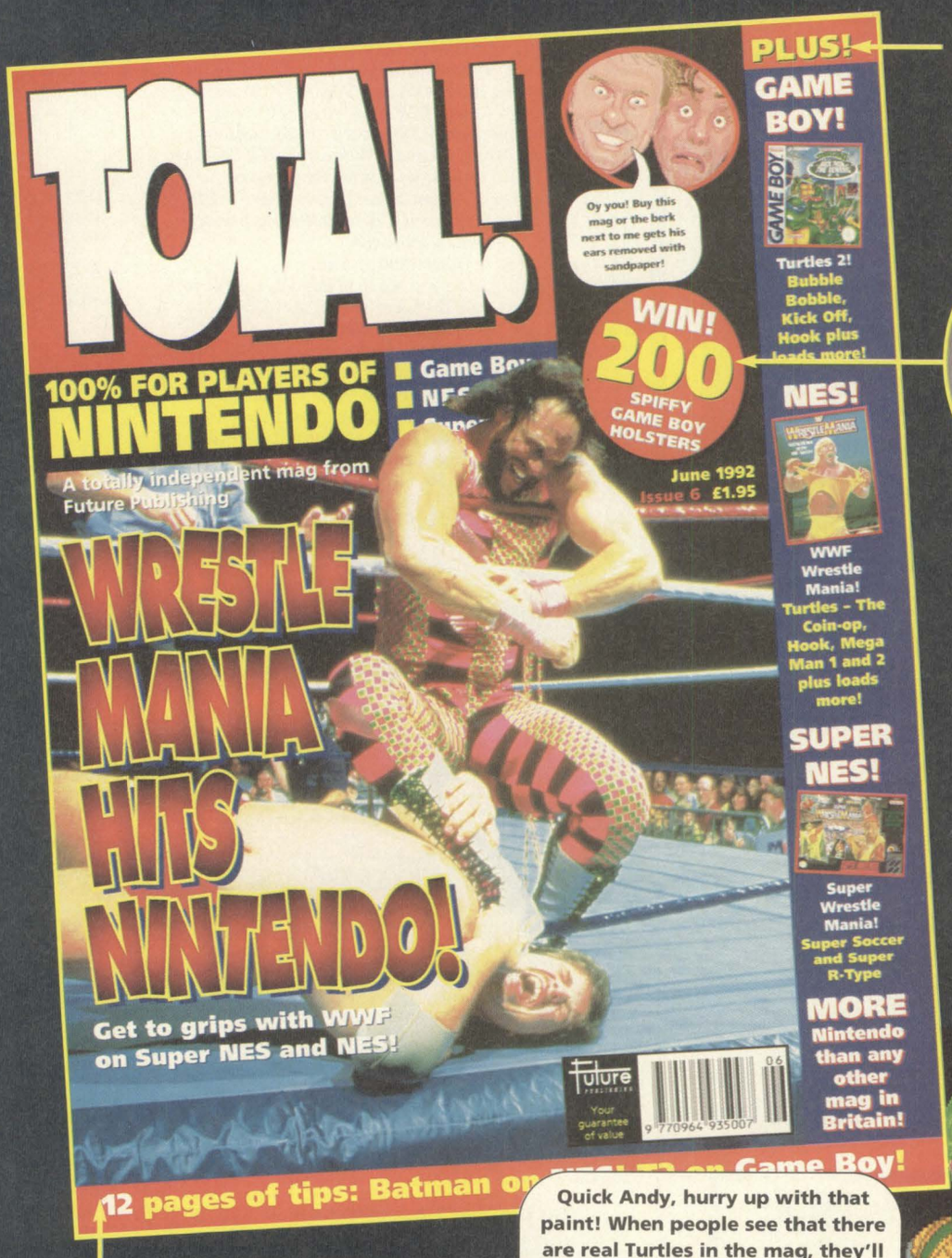
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Yeah... shame you didn't have it a bit sooner, though – we've been spotted. Um, hi there potential reader person (gulp!)
Quick Andy, hurry up with that paint! When people see that there are real Turtles in the mag, they'll fall over themselves to buy a copy. What a great idea, eh? And it was mine, not yours but mine. My idea, mine! Hahahahaaa!

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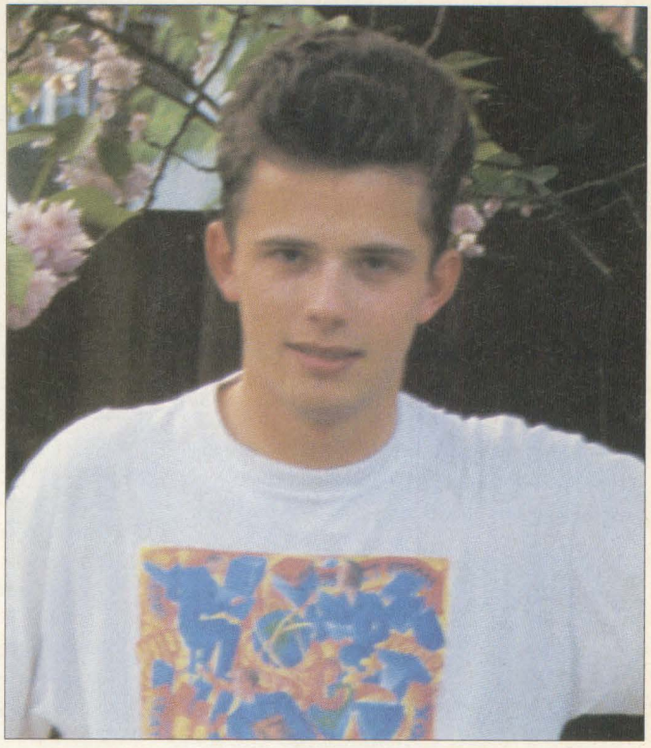
Shareware fortunes

PUBLIC EYE

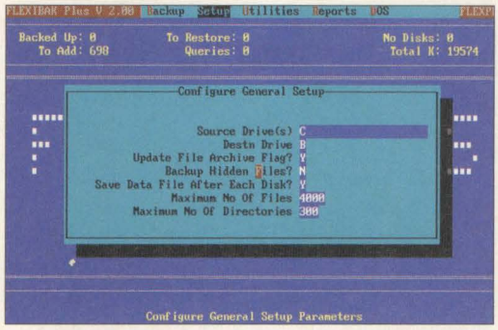


Making money out of shareware? You're wasting your time, son. At least, that seems to be the general consensus of opinion, but don't tell Adrian Mardlin that. He's boss of the one-man shareware company Nildram software, and doing very nicely, thank you very much...

Most people involved with shareware have some other full-time job. The idea that they could survive soley on the proceeds from writing or distributing shareware seems laughable. But Adrian Mardlin, in a surprisingly short amount of time, has proved that it can be done; he has built up his shareware business from a part-time evening-only operation to his only source of income in less than three years. Perhaps part of this success can be attributed to the fact that Nildram Software, his company, is involved in a wide variety of shareware-related projects...

PD: Adrian, you seem to have your fingers in all sorts of pies as regards shareware; you have a bulletin board system, you offer a registration service and you're an author. How do you find the time to do all these things?

AM: I think the strict answer to that is I don't. Basically because I'm working from home I can work all sorts of hours and if I'm not doing anything on an evening I'll come in and do some work and just try and fit it all in as best as possible. I do do various things – the bulletin board to a very large extent is a hobby – it's something I was interested in, doing communications and stuff, so that isn't really such a part of the business. I can concentrate my mind on other things and when I need to work I can let the BBS run itself to a certain extent.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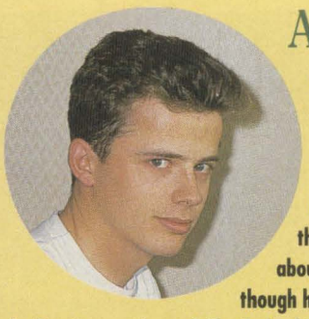
***Flexibak Plus 2* is Nilrdam's latest project and is a program that's been continuously developed over a period of time**

In the States shareware is widespread and successful and there seems to be a lot of very good, quality software. How do you think British shareware relates in comparison to American shareware?

There are some very good British products around – there just aren't so many. The situation in the States and England is the same in the sense that there are a lot of programmers who write funny little programs and try to market them as shareware so they can make ten quid or whatever and most of the time they fail miserably. We've got these programs in England and they've got them in the States as well – we just never see them because they don't make it across the water to these shores so much.

I think we're getting there in terms of quality – I think people in the States consider that it may be a way of earning a living more than the people in England do. On the other hand I think that our

Adrian Mardlin: the road to shareware success



Adrian Mardlin is the 23-year old proprietor of Nildram software. He's been running the business for about a year full-time, though he started writing the first incarnations of *Flexibak* while at university instead of getting on with his Maths degree.

His interest in computers stems way back to the early days of home computing, when he was 14. He started writing games on his home computer, some of which were even published in computer magazines. Then, when he was old enough to take his driving test, he flogged the computer and bought a car instead. His interest was re-established when his father brought home a computer – a PC, of course – from work. When Adrian went away to university he took 'his' computer with him and started writing *Flexibak* as a way to do back ups. His course work fell by the wayside and he returned home the day before his exams to start work as a programmer for a local computer firm.

He still spent time working on *Flexibak*, and in April 1989 released it as shareware. Much to the surprise of his work colleagues, he received his first registration on 30th June 1989. But that was just the beginning...

About another 30 registrations came between then and next January. Then, the program appeared on a *PC Plus* cover disk and suddenly registrations were flooding in at the rate of about ten a day. It was at this point that Adrian first thought it would be possible to make a living from being a shareware author alone.

It wasn't until June last year that Adrian left his job and worked at Nildram full-time, though. In the meantime he joined the Association of Shareware Professionals – an organisation which aims to promote higher standards in shareware – organised distribution and registration points for his programs in the States and produced *Nildram Menu* and *Flexibak Plus*, a completely re-written version of the earlier program.

Nildram is currently based at Mardlin's parents' home in the Buckinghamshire suburb of Amersham, but Adrian is hoping to move into an office soon and is currently working on a version of *Flexibak* for Windows.

cont. on p50

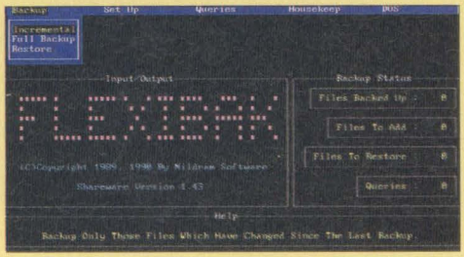
cont. from p49

The Mardlin discography

A complete run-down of the shareware products written by Adrian Mardlin in the words of the man himself...

FLEXIBAK – April 1989

"*Flexibak* was first written to replace an XCOPY-based batch file that I used to back up my data files. It wasn't particularly powerful, but it was original and simple to use. It didn't support files larger than one back-up disk and didn't have file compression. However, it enabled the user to be very selective in their choice of files to back up, so that it could be easily configured to back up just the important data



The one that started it all: *Flexibak* in its original incarnation released three years ago

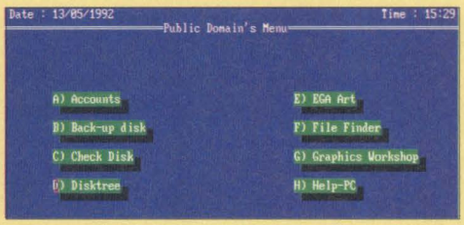
files, thus saving a lot of time and space.

"Perhaps the thing that made *Flexibak* stand out the most was its original approach to back-up; the incremental back-ups were placed over the top of the initial full back-up. This meant that a full back-up only ever had to be made once, the first time it was used.

"It was launched with a registration price of £14.95, and appeared on the February 1990 *PC Plus* cover disk. I received a good response. It's no longer available and has been replaced by *Flexibak Plus*."

NILDRAM MENU SYSTEM – July 1989

"This was designed to overcome the major problem that (almost) all menu systems suffered from at the time – they took up too much memory. In contrast, the *Nildram Menu System* had a very small memory requirement when running other programs (less than



***Nildram Menu System* allows you to negotiate your way around DOS without resorting to the dreaded CLI**

2K). This is where the name of my business came from – Nil DRAM. It also happens to be my surname backwards. Handy that.

***Nildram* also had lots of other nice little features such as a screen blanker, date and time display, as many sub-menus as you like and, later on, full mouse support. It has not been updated for a year or**

impression of what is going on in the States is actually better than the reality of it.

How about registration – do the British public register? If not why not? And what can be done to encourage registration?

Firstly yes they do, or I wouldn't be here in business. If not why not? The reasons why not are varied. You've got to have a top quality program for people to register – a lot of the time. In the past people have said the British have a bad reputation for registering software because there is so much American shareware and it's so hard to register. But that situation's improving with more and more shareware companies taking credit cards and the appearance of agents in the UK. It's just a case of putting forward a good product with good documentation that's something people *need* and that they're going to carry on using. But it's a different kettle of fish for different products really.

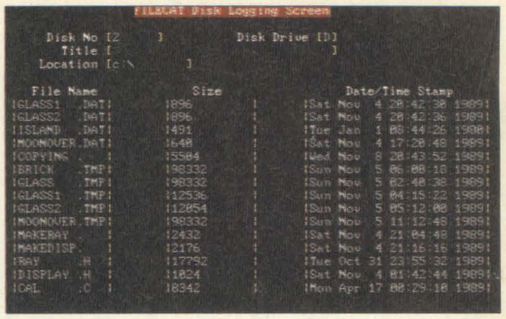
Have you any idea of percentage of products that are registered? Would you like to hazard a guess as to how many?

That is the million dollar question – the answer is a complicated set of sums with an unknown factor in them. You basically cannot tell. The closest I've come to getting some kind of idea is when the program is on a magazine cover disk – but even then you can't tell because it's going out to an audience of people who wouldn't have picked it up anyway – 50 per cent of them at least. It's very difficult to tell how many people are actually using a product as opposed to those who have registered it.

How many registrations do you have for, say, *Flexibak Plus*?

Flexibak Plus – I think we're up to about a thousand now – that's since this time last year. Plus there's the original *Flexibak*, so a lot of those thousand people have upgraded.

It's been around in some incarnation for the past three years and I've actually built up a customer base. I can do upgrades, have made a number of improvements to the program and you make a significant amount of money from doing upgrades. There are always a lot of people out there who know about it and it just keeps on going.


FILECAT Disk Logging Screen
Disk No [2] Disk Drive [D]
Title [ ]
Location [c:\ ]
File Name Size Date/Time Stamp
!GLASS1 .DAT! 1896 ! !Sat Nov 4 20:42:38 1989!
!GLASS2 .DAT! 1896 ! !Sat Nov 4 20:42:36 1989!
!ISLAND .DAT! 1491 ! !Tue Jan 1 00:44:26 1980!
!MOONOVER.DAT! 1648 ! !Sat Nov 4 17:20:48 1989!
!COPYING . ! 15584 ! !Wed Nov 8 20:43:52 1989!
!BRICK .TMP! 198332 ! !Sun Nov 5 06:08:18 1989!
!GLASS .TMP! 198332 ! !Sun Nov 5 02:48:38 1989!
!GLASS1 .TMP! 112536 ! !Sun Nov 5 04:15:22 1989!
!GLASS2 .TMP! 112854 ! !Sun Nov 5 05:12:08 1989!
!MOONOVER.TMP! 198332 ! !Sun Nov 5 11:12:48 1989!
!MAKERAY . ! 12432 ! !Sat Nov 4 21:04:48 1989!
!MAKEDISP. ! 12176 ! !Sat Nov 4 21:16:16 1989!
!RAY .H ! 117792 ! !Tue Oct 31 23:55:32 1989!
!DISPLAY .H ! 11824 ! !Sat Nov 4 01:42:44 1989!
!CAL .C ! 18342 ! !Mon Apr 17 00:29:18 1989!

***FileCat* keeps track of all those important programs for you. First of all you need to log them all in, a time-consuming process**

Do you think that offering incentives is an important part of getting people to register?

Yes. I don't believe in crippling software. Incentives like printed manuals, support and upgrades are some of the best you can give, although that again depends on the kind of software that it is – with games the Apogee system of offering sequels when you register seems to work pretty well.

I've had varied success with different products. *Flexibak Plus* has been very successful whereas I'm releasing another product which is good quality but it's not the kind of product which people are going to register to such a degree.

I think the kind of programs that people will register is something that they may use every day – something that's always going to be in the forefront of their mind; or, with *Flexibak Plus*, when it saves their bacon. I get phone calls from people saying, "My hard disk crashed yesterday and this restored all my data. Can I send you some money please." On that basis the back-up system is a very good product to put out as shareware.

It's important to have some incentives, obviously. In this country people are gradually beginning to realise more and more about shareware, so they need fewer incentives. It's drawing the fine line really, because it's good to put your best foot forward, in which case you want the most modern version of your program fully available as shareware so that people will look at it and think 'Wow!'

If you have last year's version available it's not going to be quite so impressive. On the other hand, you need to give people some kind of incentive to pay out their money.

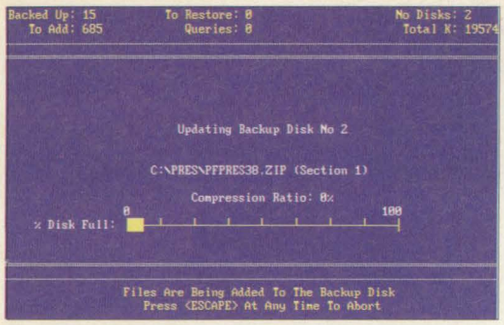
Programmers like Nels Anderson had a tough time getting registration from UK users of his games – until Nildram became his agent, that is

Double agent

As well as marketing his own products, Adrian also acts as an agent for registering several foreign authors' software and has similar reciprocal agreements for others to collect his own registration fees.

Five foreign authors are currently involved in the scheme, including Nels Anderson, who's produced the *Shooting Gallery* and *EGA Trek* games amongst others. Most of the authors are American, but Adrian also has connections with European authors.

Registering foreign orders directly



Flexibak Plus always keeps you informed of what's going on. In this screen you can see how much data has yet to be copied

What are the benefits of releasing software as shareware as opposed to releasing it commercially?
Many. Overheads and advertising are far less. The good thing about it is that people can gradually move into the industry; if you go into retail software and start advertising you need £50,000 or whatever to really do a good job straight off – you need to take risks and you've got to have a top notch product. In shareware people can gradually get into the industry and see whether a product is going to sell. That's what I did. I started gradually with a list of products and maybe spent £50 sending it out to the shareware libraries and gradually getting the sales and then putting that money back into the business and gradually building things up. Eventually you get to a stage where you can compete with the retail guys, but with minimal risk. I mean my chances of going bankrupt next month, compared to someone who's maybe spending £50,000 on advertising – is minimal, and I'm happy.

Generally all your programs so far have been utilities or similar. Do you have any plans to move into games, or into other areas?
Utilities have a disadvantage in that they have a limited life-span. For example, the back-up system will be redundant in ten years' time as everyone will be using optical disks.

If someone tells me to do something and it's the right idea and I think it will make a succesful shareware product then I will go ahead and do it. It's a question of thinking up new and original ideas. Another calendar program or another text editor is not going to help unless it's the best in the world – which I would try to make it anyway. But it's best to have something unique. Half the struggle is getting the idea for the right product in the first place, the other half is writing it.

Is there any restriction to who can distribute the shareware that you write? Does it have to be an Associated Shareware Professional (ASP) vendor or can any old library do it?
A lot of people have different rules and regulations. Quite a few ASP authors say ASP vendors alone can distribute their software unless another library specifically asks for permission. I tend to be a bit more lenient now – a lot of people will distribute stuff anyway despite what authors say. Bulletin boards are OK because they are not making a profit. Vendors are making a profit. I reserve my right to withdraw the permission from anyone.

Do you think that some libraries charge excessively – obviously it varies from library to library?
My opinion used to be that they should charge very, very little, but that has changed because they've got a nasty little job on. Some people used to charge far too much – if you saw something new for £3-4 a disk then that was getting a bit excessive; the library was not going to sell many copies. But the people who pop up overnight and charge 50p a disk went down as quickly as they popped up, because there are a lot of overheads; you need offices, you need copying equipment, all of which costs thousands of pounds, and you cannot do that on 50p a disk.

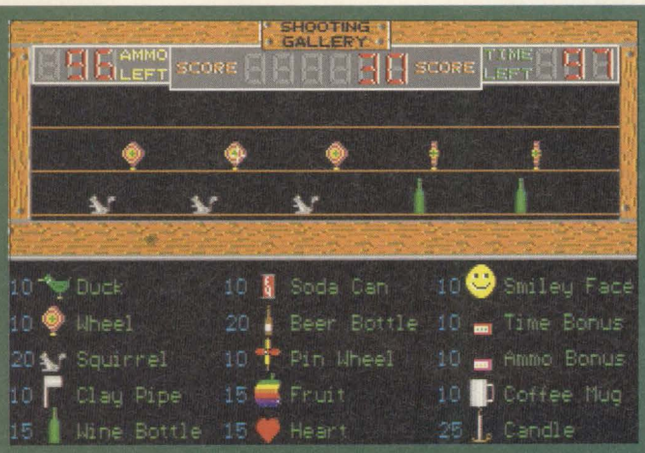
The people who charge more generally have a better-run library. The really important thing is to make sure you have the latest versions in, that you have the all latest software, that kind of thing.

I think that the days of it being a good scene for the opportunists to charge a lot of money and make loads has gone; competition has arrived so there is only so much you can charge and get away with.

A lot of people would say shop around and try to find the cheapest person, which I used to do a long time ago, but then I settled with someone who provided a good service at a good rate, so I gave them my loyalty. This is the way to purchase shareware really, otherwise you are just feeding the people who put no effort into the job and will just go bankrupt eventually or have a lousy library.

is notoriously difficult as money has to be transferred into Dollars, Marks or whatever, all at exorbitant bank charges. This can often amount to more than the registration fee itself, not surprisingly discouraging otherwise conscientious overseas users from registering.

Having an agent to take care of collating your overseas registrations makes a lot of sense, and Adrian hopes to offer his services to other authors when he visits the States this summer to attend the 1992 Shareware Seminar held in June in Indianapolis. While he's there he is also taking the stand to talk about experiences as a UK author.

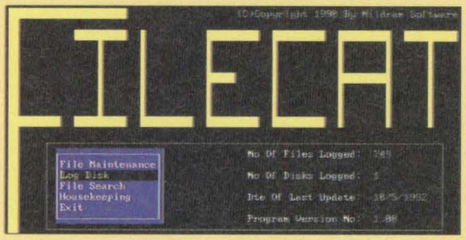


It's a great program, but how do you register it? By getting in touch with Nildram, that's how! Send in the dosh and it will get distributed to the right person

two, because it doesn't really need it. I have used the program every day since the day I wrote it, and haven't outgrown it yet. The price is £14.95 plus VAT and it is still available."

FILECAT – December 1990

"*FileCat* is a floppy disk file cataloguing system. It's designed to help organise the thousands of disks that most of us seem to collect, and enables the user to quickly and easily locate a file or disk. You first create a database of the disks by inserting each disk in turn



FileCat overcomes the problem of where to find that file. It keeps track of them all and lets you find them easily

and giving it a title and location code. *FileCat* then scans the disk and puts all the files on it into its database. You can then find a disk by searching for its title, or find a file by use of wildcards (e.g. "*.BAT")."

FLEXIBAK Plus 1.0 – May 1991

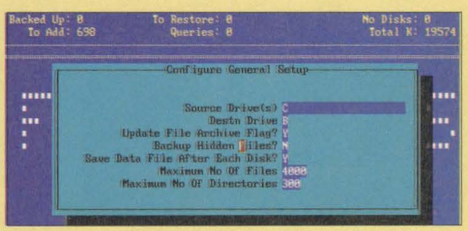
"Launched last year, this was a complete re-write of *Flexibak*, designed to overcome the major limitation of file size, and included an improved user interface and data compression. Back-ups could be made even more

Flexibak Plus was a major improvement over the original program and is almost a complete re-write

selective, and there was now a facility for running multiple back-up sets concurrently for even better security. Priced at £29.95, *Flexibak Plus* was now beginning to compete with its retail counterparts."

FLEXIBAK Plus 2.0 – February 1992

"Launched at the beginning of this year, priced at £39.00 plus VAT, this version was a major step forward. Speed was increased substantially, disk formatting options were added, selective back-ups could be even more selective, and many other parts of



Flexibak Plus in its current incarnation – version two. Faster, friendlier and with many more options

cont. on p52

cont. from p51

Authors' meeting point

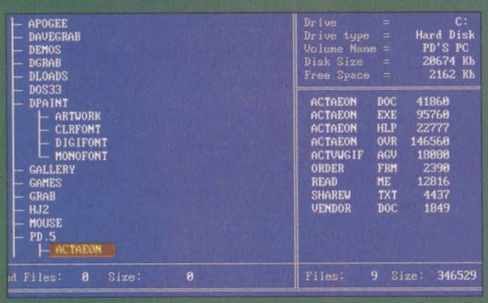
Nildram's bulletin board, The Shareware Support BBS, isn't just a board from which the public can download programs (though there are plenty of files available should you want to do so). It is also a forum for authors to discuss their programs with the public at large, share ideas and expereinces between one another, and generally promote their shareware products.

Most programmers are receptive to constructive criticism and welcome feedback from users so that they can improve their software; after all, they want their products to be as good as they can be in order to entice as many people as possible to register. The programmers involved with the board often upload their programs as soon as they're completed and so users can be sure that they'll be able to obtain up-to-the-minute verisons of the latest programs.

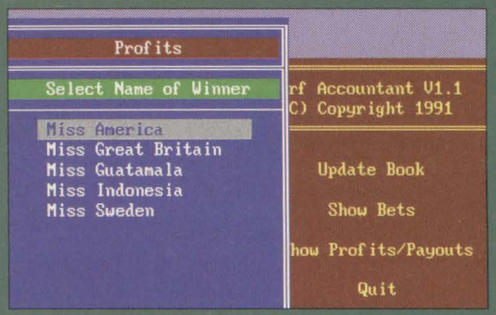
Authors can take advantage of this service as a means to encourage users to register for their shareware. Credit card holders can even register programs directly with the author while on-line.

Adrian has plenty of contacts with US authors and bulletin boards, so anyone hungry for a slice of Stateside software can be sure that the Shareware Support BBS will be amongst the first places to which they'll turn to satisfy their appetites.

For these reasons the board is becoming ever more popular with authors and the public alike. You can even leave a message for *Public Domain* – we're open to a little constructive critisism too!



You can get directly in touch with Jon Clemper, the author of *Acteon'*, through Nildram's bulletin board system



Turf Accountant is one of the many programs you'll find supported by the author on The Shareware Support BBS

Nildram offers a registration service for foreign authors. What advantages do they have registering their products through you?

Well, if anyone's tried sending a cheque to the States they'll know one advantage straight off. There are great advantages from my point of view and the US authors' point of view. It means that there is someone over here who can actively promote the US authors here and send their software out to all the vendors as soon as it becomes available. From the user's point of view, they can pick up the phone and register now using a credit card, and get the product within a day or so. It's a lot simpler and quicker and we try and keep the prices about the same as well.

How many foreign shareware authors do you act as an agent for? Do you regard this as a substantial part of your business?

I think it's five. At the moment it isn't a substantial portion of my income, because shareware takes a long time to get going. It's like a snowball effect; it starts off slowly and when it builds up until you can't stop it. I've been doing it for almost a year with some of them – the wheels are only just geared into motion.

Do the programs you release from other authors have to achieve any kind of standards before you'll act as an agent.

Yes, I won't take just anything. I'm a lot more fussy now than I was a year ago. It's very easy to look at it and say, "Hey, let's take on ten products and we just have to send the disks out to the vendors and do a press release or something then just take the money." But there's a lot of work involved in one program, which I did not realise at the time and I'm beginning to realise more and more. So now my requirements are more stringent, as it were, and rather than taking on lots of different products I now try to find one or two top notch products that would go well with *Flexibak* maybe and market those ones.

Is it possible to make a comfortable living as a shareware author in this country?

Yes, but it's not very probable. I don't know how many people are doing it, but there aren't many. It's a learning process; you have to take a couple of years to get going as a shareware author. I had a full-time job for up two years while I was gradually building the business to a stage where I could leave my job and run the business full time. This in turn accelerated its growth even more because I could put more and more time into it.

What advice would you give to prospective shareware authors?

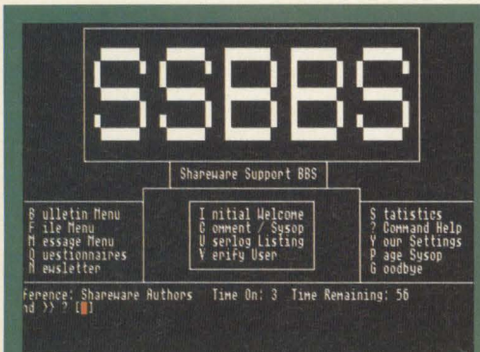
Find a niche – that's the really famous one. Do something original, something different. I've got a back-up system which you may say is not a niche, but it's different; there's no other back-up system like it, which gives it an attraction – it's the kind of thing that people will either love or hate. It's got to be something different. Don't write another word processor or another general database, do something different, something for Windows would be good at the moment.

Send out press releases, don't just sit on it and expect things to happen. There are a lot of things you can do to market your product; the problem is most shareware authors are good programmers but they know nothing about marketing, so you have to get involved and start learning, the hard way. I think that's one of the only ways of doing it! Just do all you can to promote your product.

The UK isn't that bad. I'm selling more copies in the UK than the Americans are selling in America and I've now got an agent in the States and the story over there is pretty similar to the story over here. It *is* possible to make a living in the UK with shareware!

Getting in touch

Nildram's products are available from most PC shareware libraries and bulletin boards or direct from Nildram Software, 26 Stanley Hill Avenue, Amersham, Bucks HP7 9BD ☎ 0494 729236.

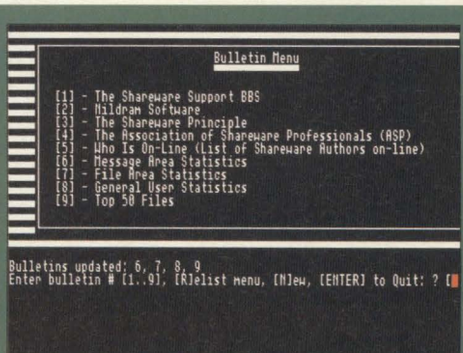


Shareware Support's main menu. This is what greets you when you first log on to the board

All aboard the BBS

Nildram's bulletin board, The Shareware Support BBS, has been up and running since June last year, basically starting when Nildram became a full-time concern. It's a free access board – you don't have to pay anything to log on, you just have to fill out a questionnaire. There is a voluntary membership scheme which costs £15 per year. Members can download as much as they like; otherwise for every six files they download, they are expected to upload something in return.

● Modem owners can log on to The Shareware Support BBS on ☎ 0494 431861. It operates on the following protocols: V21, V22, V22bis, V32, HST, V42, V42bis.


Bulletin Menu
[1] - The Shareware Support BBS
[2] - Nildram Software
[3] - The Shareware Principle
[4] - The Association of Shareware Professionals (ASP)
[5] - Who Is On-Line (List of Shareware Authors on-line)
[6] - Message Area Statistics
[7] - File Area Statistics
[8] - General User Statistics
[9] - Top 50 Files
Bulletins updated: 6, 7, 8, 9
Enter bulletin # [1..9], [R]elist menu, [M]ew, [ENTER] to Quit: ? [

Much of the bulletin board is dedicated to authors of shareware programs where they can exchange ideas

RICOH PCL5 LASER PRINTER

Ricoh UK Ltd is part of the worldwide Ricoh Group of companies, originally established in Japan, in 1936. With a turnover of over $5 billion and 37,000 plus employees, Ricoh has been producing computers and peripherals since 1971. They are renowned in the industry as pioneers in the field of Office Automation Equipment and have won many awards for outstanding industrial design. Ricoh have employed all their expertise to produce a 'first' in laser printers for the worldwide market, the LP1200 with FLASH ROM.

Fully HP LaserJet III™ compatible, the new LP1200 laser printer employs industry proven laser technology. Unlike LED page printers, which use light emitting diodes, the LP1200's laser lightsource, focussed by high quality lenses, is able to produce the most accurate and intense printed images. It has 2Mb of RAM built-in and requires no additional RAM to print a full A4 page of graphics. Its fast, efficient processor and engine, together with straight paper path design, allows printing at a full 6 pages per minute. Unlike its competitors, this advanced laser engine enables the LP1200 to address a range of print resolutions up to 400dpi. A printer driver is scheduled for release in late May, to enable the Ricoh LP1200 to print at 400dpi from Windows 3.

Again, unlike the competition, the LP1200 includes a powerful document description language as standard. This language, 'LAYOUT', offers unique opportunities to develop custom-made printing systems. In particular, forms and document templates can be designed and stored electronically in the LP1200's unique FLASH ROM, alleviating the need for pre-printed forms!

The Ricoh LP1200 is a genuine laser printer and not an LED printer. Make sure you check out the competition!

FLASH ROM UPGRADABLE!

400dpi 2Mb RAM 6PPM

FULLY HP LASERJET III™ COMPATIBLE

Silica Systems are pleased to introduce the revolutionary, new Ricoh LP1200. It has all of the specifications that you would expect to see in today's most technically advanced laser printer, plus a unique additional feature which places it far ahead of the competition - FLASH ROM. This 'Future Proof' technology protects the investment you make when you buy a Ricoh LP1200, as it enables you to keep up to date with new laser firmware developments. FLASH ROM is an area of memory inside the LP1200 which holds the printer's controller instruction firmware. If new firmware is developed, updated printer command languages etc, can be downloaded into this memory. Other manufacturers would require you to buy a new printer! Fonts, macros, additional emulations and graphics can also be stored in FLASH ROM, or on removable FLASH ROM IC cards. The new Ricoh LP1200 is the only laser printer to offer this FLASH ROM facility.

- ***6 PAGES PER MINUTE***
  Using a straight paper path design
- ***PCL5 - SCALABLE FONTS***
  Latest PCL version, includes HP-GL/2
- ***SHARP EDGED PRINTING***
  Ricoh FIAL (Fine Image ALgorithm) enhances resolution
- ***400dpi RESOLUTION***
  Default resolution - 300dpi. Will address 200, 240 and 400dpi.
- ***2Mb RAM AS STANDARD***
  Allows printing of a full A4 page of graphics at 300dpi
- ***UNIQUE FLASH ROM***
  For controller software upgrade and storage
- ***IC CARD SLOT***
  For programmable FLASH ROM cards
- ***EXPANSION BOARD SLOT***
  For improved connectivity to additional systems eg. PC-LAN, FAX etc
- ***LAYOUT***
  Document Description Language
- ***SERIAL + PARALLEL PORTS***
  For connection to PC compatibles and other computers
- ***1 YEAR ON-SITE WARRANTY***
  8 hour response

See how the Ricoh LP1200 compares to its Laser Printer Competitors

FEATURES	EPSON EPL4100	HP LASERJET IIIP	MANNESMAN TALLY MT904+	RICOH LP1200
Average Street Price (*expected)	£569	£699	£699*	£699
Official RRP	£945	£1,179	£1,099	£1,195
Maximum resolution in dots per inch	300x300	300x300	300x300	400x400
Windows 3 Driver @ 400 dpi (May)	-	-	-	YES
Print Speed	6ppm	4ppm	4ppm	6ppm
Straight Paper Path	YES	-	-	YES
PCL 5 Printer Command Language	-	YES	YES	YES
HP-GL/2 Vector Graphics included	-	YES	YES	YES
Resolution Improvement/Enhancement	YES	YES	YES	YES
Full A4/300 dpi graphics with standard RAM	-	-	-	YES
Warm Up Time	<45 secs	<60 secs	60 secs	45 secs
First Page of Text Output	<20 secs	<40 secs	34 secs	<15 secs
Document Description Language included	-	-	-	YES
Flash ROM	-	-	-	YES
Upgradable Firmware	-	-	-	YES
IC Card Slot	YES	-	-	YES
Scalable Resident Fonts - in HP LJ III Emulation	-	8	8	8
Resident Bit-Mapped Fonts	11	14	14	14
AGFA Intellifont Scalable Font Technology	-	YES	-	YES
HP LaserJet III Emulation Included	-	YES	YES	YES
EPSON FX Emulation Included	YES	-	YES	YES
IBM ProPrinter Emulation Included	-	-	YES	YES
Standard Tray Capacity	100	70	100	100
Protective cover on standard tray	YES	-	YES	YES
Cost per copy*	1.65p	2.00p	1.71p	1.65p
Min-Max Paper Weight in gsm	60-157	60-105	60-120	60-157
Able to print on OHP Film	YES	YES	YES	YES
Able to print on card (157gsm - Manual Feed)	YES	-	-	YES
Auto Sensing on Parallel and Serial ports	YES	-	-	YES
Standby -Noise Level	<40dB	31.7dB	<35dB	<38dB
Printing -Noise Level	<50dB	43.3dB	<46dB	<48dB

*As quoted by manufacturers - 2/4/92 E & OE

All Trademarks are acknowledged

DUAL BIN VERSION
SPECIAL PRICE WITH UNIVERSAL FEEDER
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+VAT=£938.83
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LP1200 (WITH SINGLE BIN) SILICA PRICE:
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- ***FREE OVERNIGHT DELIVERY:*** On all hardware orders shipped in the UK mainland.
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- ***SHOWROOMS:*** Demonstration and training facilities at our London & Sidcup branches.
- ***THE FULL STOCK RANGE:*** All of your requirements from one supplier.
- ***FREE CATALOGUES:*** Will be mailed to you with offers and software/peripheral details.
- ***PAYMENT:*** By cash, cheque and all major credit cards.

Before you decide when to buy your new laser printer, we suggest you think very carefully about WHERE you buy it. Consider what it will be like a few months after you have made your purchase, when you may require additional peripherals or consumables, or help and advice. And, will the company you buy from contact you with details of new developments and products? At Silica Systems, we ensure that you will have nothing to worry about. We have been established for over 12 years and, with our unrivalled experience and expertise, we can now claim to meet our customers' requirements with an understanding which is second to none. But don't just take our word for it. Complete and return the coupon now for our latest Free literature and begin to experience the "Silica Systems Service".

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Order Lines Open:	Mon-Sat 9.00am-6.00pm	No Late Night Opening	Fax No: 081-308 0608
LONDON SHOP:	52 Tottenham Court Road, London, W1P 0BA	**Tel: 071-580 4000**	
Opening Hours:	Mon-Sat 9.30am-6.00pm	No Late Night Opening	Fax No: 071-323 4737
LONDON SHOP:	Selfridges (1st Floor), Oxford Street, London, W1A 1AB	**Tel: 071-629 1234**	
Opening Hours:	Mon-Sat 9.30am-6.00pm	Late Night: Thursday until 8pm	Extension: 3914
SIDCUP SHOP:	1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX	**Tel: 081-302 8811**	
Opening Hours:	Mon-Sat 9.00am-5.30pm	Late Night: Friday until 7pm	Fax No: 081-309 0017

To: Silica Systems, PUDOM-0792-75, 1-4 The Mews, Hatherley Rd, Sidcup, Kent, DA14 4DX

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Mr/Mrs/Miss/Ms: ..... Initials: ..... Surname: .....

Address: .....

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Demos

Roll up, roll up! Come and see the blonde bimbo superheroine. Marvel at a mutant Paul Daniels. Gasp at the latest industrial music. Yep, it's another round-up of the latest demos where the weird and the wonderful are the norm. Maff Evans guides you through this strange netherworld...

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Flick through to the feature on copyright in this issue and you may find out some rather interesting information about the legalities of what's copyright and what isn't. This is a tricky business all round, but it bares closer relevance to the world of demos than most other areas of PD. After all, how many slideshows of films and remixes of chart hits have we seen in the demo world? Almost too many to keep track of! In general, most demos 'paying tribute' to famous stars seem harmless enough, and don't really make much difference to the film market, but in music it's a different matter.

In this issue alone, there are several demos which contain versions of recent hit tracks. The *Two Toms* disks are a case in point, since they contain entire tracks. When you consider that a 7-inch single costs around £2 and a PD demo costs somewhat less, the amount of money being diverted could be quite considerable. When you couple the fact that it's highly illegal with the unoriginality of simply sampling an entire song directly, you're treading on very thin ice.

What would be a preferable state of affairs is if more original songs were put out on disk (such as is the case with the heavy industrial songs of Nic Cusworth). If this happened more often, there could be a whole musical scene appearing in the PD circuit, perhaps even with some of the bands becoming full-time performing acts.

It could happen!

The Digi-music demos

Most ST music demos aren't renowned for their use of samples to play the tunes, but the Acapella Choir has made a decent effort with its *Digi-Music Demo* disk.

It starts with a nice Mandelbrot picture, followed by an intro screen listing the tunes, along with some comical digitised pictures of the coders. After selecting whether you're using an STE or STFM, a rather odd tune plays, littered with all manner of grunts and burps, which compels your hand towards the Space bar to load the main section!

All the tunes are loaded by selecting their relevant icon on the desktop, which then pulls up a picture to accompany the music. Once again you have to select the type of machine you are using before the demo starts. For the most part, the graphics comprise various digitised pictures of the artist responsible for the track, assembled into a collage. The tunes themselves are pretty good; all the samples are clear and well-recorded. Occasionally, the interpretations of the songs leave a little to be desired, such as the rather farty melody sound on the UB40 demo or the fact that the Adamski remix seems to slow down and go out of tune at times.

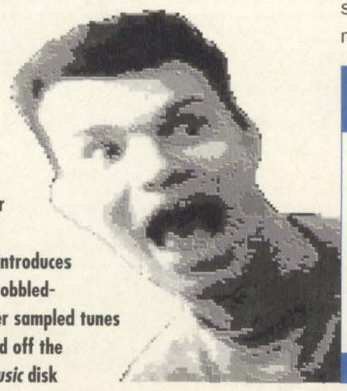
The most impressive piece is the Donna Summer mix, which samples elements from 70s synth-disco and early 80s electro-pop to produce an extremely effective version of *I Feel Love*. The track goes on for about seven and a half minutes, so be prepared for some lengthy listening!

The only section that lets the demo down is the last part: *Disciples of Synth*. This is just a few cobbled-together tracks that don't deserve much space of their own and don't match up to the quality of the other tunes. However, the majority of the disk is fairly impressive. You don't often see this kind of attention to detail in sampled ST music, so maybe some more imaginative and intricate music demos will follow this lead.

No wonder Seal left to do his own thing. After all, who wouldn't be peeved about being put into a little box by Adamski?

The hit songstress of the 70s and 80s, *Blondie*, also appears on the disk. She doesn't have a lot of colour in her cheeks here though

A few strange-faced individuals and a cool cat with a guitar. Which of these would you invite to your home for biscuits and Horlicks?



Another leering fizzog introduces a few cobbled-together sampled tunes to round off the *Digi-Music* disk

IN BRIEF

Type	PD
Author	Acapella Choir
Requirements	512K
Available from	Goodman's PDL, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW ☎ 0782 335650

ST 76%

BRITISH BOARD OF FILM CLASSIFICATION
This is to certify
The Sword of Tipu Sultan :Disk 84
15
Suitable only for persons of 15 years and over

Don't you hate it when people get in the way when a film is about to start? Oi! Sit down! We can't see the screen! Clonk!

Win friends! Look cool when your boss comes around! If this doesn't appeal then buy a Chainsaw Slipper wig and look a prat

What's this? Spooky alien invaders intent on taking away our human rights? Argh! Call the militia! Phew! It's only a demo

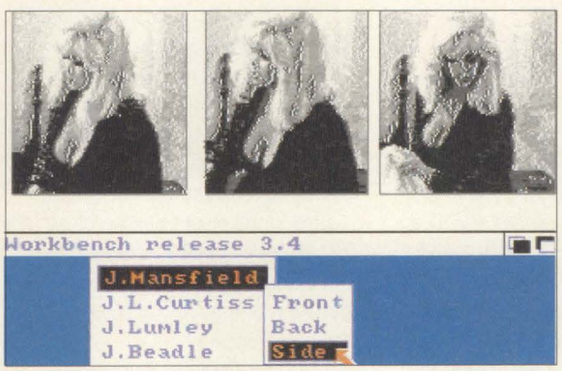
The Sword of Tipu Sultan

This is one heck of a silly demo! Try to imagine the strangest scenes you can featuring Terry Wogan, Hendrix, Les Dawson, *Monty Python*, a comedy wig and God. Got the picture? No? Well it's not surprising, since you'd have to have a pretty warped sense of humour to stick all that lot together, which is exactly what Chainsaw Slippers has done to bring us *The Sword of Tipu Sultan* demo.

The scene starts in a dark, night-time street. The quiet is disturbed by the *Monty Python* team all dressed as Gumby directing the viewer's attention skyward (well, I did say it was silly).

The state of the world isn't as bad as people make out, honest. Now hold on... what's that ticking sound? Well, I could be wrong...

What do you get if you mix together Terry Wogan and Paul Daniels? A disappearing chat-show host. And that's magic!



Now, just come on! We could well do without this kind of voyeurism in PD demos. What would the vicar think? We'll ask him, shall we, when he gets back from the pub

After a brief look in a bedroom window (for some risque voyeurism) the scene moves further into the heavens, taking in views of a flying saucer and the moon before the demo accesses a fake Workbench. This brings up pictures of Jimi Hendrix, Jayne Mansfield and Les Dawson (a very strange combination) before a couple of silly animations introduced by athletic man-about-town, Mr Creosote (if you've ever wondered what a lobotomised Paul Daniels looks like, then this is the section to watch out for).

Next it's a demonstration of the Amiga's Godbench – for a rather damning message from the Almighty. It appears that he's not very happy about man's attitude towards his fellow animals, so he's decided to send down a suitable punishment – a Terminator modelled on Terry Wogan (aaargh)!

Once this brief (but very poignant) message is over with, it's time for a few satirical adverts. The ads include a trailer for the new Clint Eastwood film (very naughty), Mr Creosote's conversation guides (even naughtier) and the one and only Chainsaw Slipper Wig (just downright silly).

To finish up, a few statistics are displayed (which are just as silly as the animation sections). This is followed by yet another ad, this time for a rather dodgy blues album by the Bert Slipper Blues Band (which is not a patch on the genius of Ry Cooder, I'm afraid).

"Now, that's magic!" No it isn't, Paul. It's a TV celebrity with a bubble coming out of his ear. I'd call that sad, not magic

The entire disk is based very much in the daft-boys camp, with all the demos being put together with the collective Chainsaw Slipper tongue firmly embedded in its cheek. The animation style, artwork and music are very simplistic (and a bit scrappy in places), but the overall feel is light-humoured enough to make it work in its own strange way. It makes a change from all the coders who take their craft too seriously, yet in some cases still manage to put together a dull, repetitive demo.

It's great to see a disk this irreverent and good-humoured, with the emphasis on entertainment rather than just clever-clever techniques. If only there were more demos with a sense of fun!

Would you take advice from these hankie-headed degenerates? Of course you would, otherwise you wouldn't see the rest of the demo!

What's in a name?

A friend reliably informs me that *The Sword of Tipu Sultan* is an Indian soap opera set in the Raj that gets aired on Sunday mornings. I'll take his word for it; me, I'm never up that early on the weekends. But this new-found knowledge doesn't help make any more sense of the demo, as there's precious few Indian Raj-type things going on – everything but, in fact!

IN BRIEF

Type	PD
Author	Chainsaw Slippers
Requirements	512K
Disk Number	S556
Available from	NBS, 1 Chain Lane, Newport, Isle Of Wight PO30 5QA ☎ 0983 529594

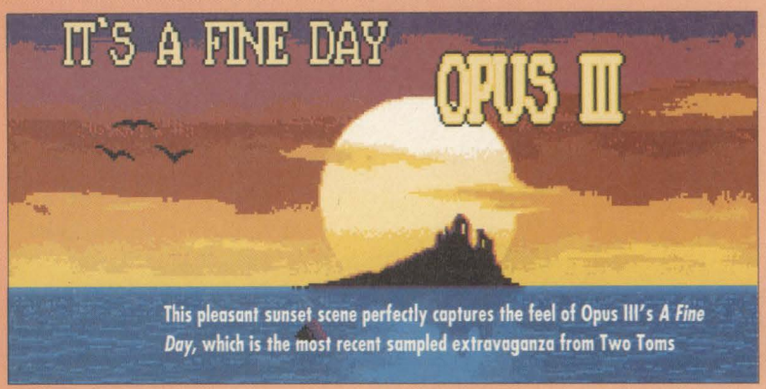
AMIGA 79%

Three from The Two Toms

But do they have the right...?

As I mentioned in my introduction to this month's demos section, the copyright issue bears strong relevance to the world of PD demos, and the Two Toms' conversions of recent pop hits are some of the most notable examples. These chaps take entire songs, sample them and put them out on disk. A bit naughty to say the least! Here are the duo's latest offerings...

A Fine Day



This pleasant sunset scene perfectly captures the feel of Opus III's *A Fine Day*, which is the most recent sampled extravaganza from Two Toms

For this disk, the Toms have chosen to record the recent chart single by Opus III, *A Fine Day* (you know, the one sung by the Tank Girl lookalike who twiddled with some strange balls on *Top of the Pops*). The demo starts off by loading a nice sunset picture, which captures the dreamy feel of the single nicely. The song itself is loaded from disk as it plays, so that the entire song can be accessed from two disks.

The sample quality is very good, capturing all the intricate details of the original track, but the problem (as with all these kind of demos) is that it isn't really very original. By spending a little more, anyone who likes the record can go out and buy it anyway, so there doesn't seem much point in putting it out as a PD demo. The only benefit is that it costs less to buy the demo, which makes it not too legitimate a practice.

IN BRIEF

Type PD
Author Two Toms
Requirements 512K • Not Plus Compatible • Two drives
Disk number 1752 (Two disks)
Available from 17-Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH ☎ 0924 366982

AMIGA 56%

Obsession

If you've watched MTV lately, then you've probably seen a video by a rather odd band called Army of Lovers. This rather over-the-top, glam/camp dance group releases disco songs that are something of a blend of Abba, Donna Summer, Soft Cell and house. A rather strange combination, admittedly, but there you go.

Some earthy colours are to be found on the screen to back up Two Toms' version of Army of Lovers' *Obsession*

For their second release of the month, the Two Toms have sampled one of the group's tracks, *Obsession*. The demo is in the usual format – loading up a picture then playing a sample of the song from two disks. The accompanying graphic is a little garish, with a rather grimy-looking gradient fill overlaid with the Army of Lovers and Two Toms logos.

The song itself is well sampled, but the old bug-bear about 'lack of originality' rears its ugly head once more. If you like the original track, you've probably got it already (since it's not a widely-played record), so why bother getting it on two disks? You could do it to show off, but there are so many other music demos with more clout and imagination you're bound to find something more interesting.

IN BRIEF

Type PD
Author Two Toms
Requirements 512K • not Plus Compatible• Two drives
Disk Number 1726 (Two disks)
Available from 17-Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH ☎ 0924 366982

AMIGA 54%

Evolution Rush

And here the Two Toms have gone for the hat-trick. This time, they've plumped for conversion of another track by Opus III, but a lesser known one: *Evolution Rush*.

The demo is a little more ambitious than the team's previous offerings, but only owing to the fact that it loads from three disks instead of two (with the listener swapping disk one for disk three while disk two is whirring away). Apart from this, the demo is in the usual load-a-picture-and -play-the-tune-off-disk format.

Gaudy isn't the word to describe the tones used on the screen that accompanies *Evolution Rush*

The tune itself is well sampled, but there still seems little point in releasing these disks for a number of reasons: the technique for creating them is built into sampling programs as *Audition 4* so it doesn't take much skill to create them; simply copying someone else's song isn't very original; and finally, it's pretty immoral to put someone else's work out without their permission. If the copyright clamp-down comes around, then demos like this may no longer appear, which might prompt some originality from demo coders!

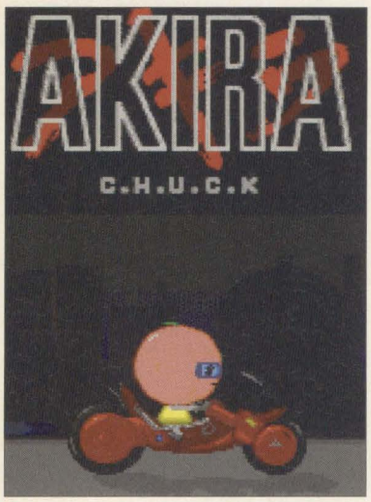
IN BRIEF

Type PD
Author Two Toms
Requirements 512K • Not Plus Compatible • Two drives
Disk number 481
Available from 17-Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH ☎ 0924 366982

AMIGA 57%

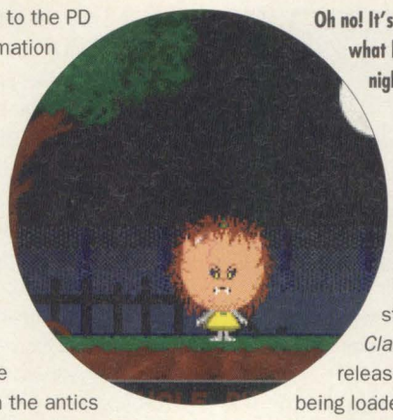
Classy Animations 1992

Steve Packer's collection of *Classy Animations* looked as though it had come to an end last year, when Steve announced that he was to abandon the series in favour of a new style of animation. Fortunately, the disappearance was short-lived, and Chuck has returned to the PD scene in a new animation collection! Hurrah!



Even a little cartoon character like Chuck can appear hard. All he has to do is star in a violent Japanese cartoon like *Akira*

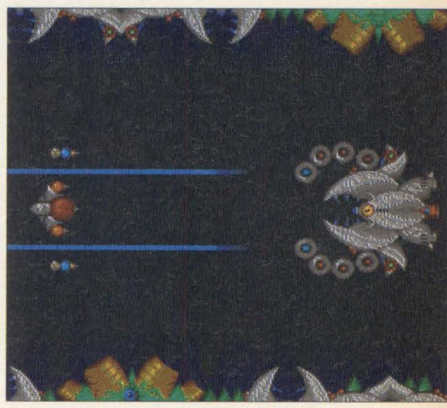
Classy Animations 1992 features six sections, including an introduction scene featuring a spaceship flying past a parallax background on a monitor. Most of the anims are based on the antics of Chuck (as usual) with the little chap taking part in a number of adventures, including riding *Akira* character Kaneda's bike, being fired from a cannon and turning into a shaggy werewolf. There is also a character profile with some historical and personal details on Chuck himself.



Oh no! It's a full moon! And guess what happens to Chuck on nights like these...?

As an aside from Chuck's adventures, Steve has included another of his designs for an end-of-level guardian from a shoot-'em-up (maybe as an effort to get into the world of game graphics – if it is then on the strength of this he's got a good chance). The disk is pretty much in the same style as previous *Classy Animation* releases, with each clip being loaded by pressing a number key on the Amiga's keyboard. The anims themselves are all fairly short loops which are displayed in a frame in the centre of the screen, but each clip is so well-drawn and excellently-animated that the lack of longevity is pretty irrelevant.

If you're a fan of Steve's earlier works, then you'll no doubt be pleased to see him return to the style that first brought him fame in the world of PD. If, on the other hand, you missed out on the previous adventures of Chuck, then this is as good a place as any to start!



Does this end-of-level guardian mock-up hint at a future for Steve Packer in shoot-'em-ups?

IN BRIEF

Type	PD
Author	Steve Packer
Requirements	512K
Disk Number	H686
Available from	NBS, 1 Chain Lane, Newport, Isle Of Wight PO30 5QA ☎ 0983 529594

AMIGA 82%

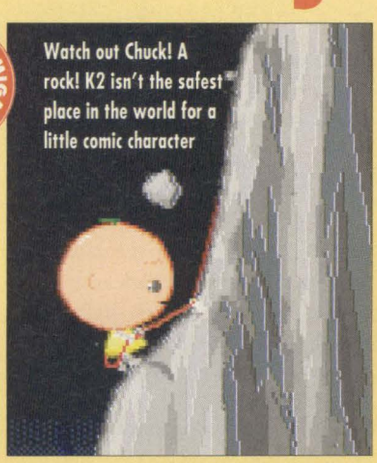
Oh No! More Classy Animations

First we mourned his loss to the PD scene. Then we were pleasantly surprised by his return in the *Classy Animation 1992* demo. And now we rejoice as Chuck returns once more and still and top form! You can't keep a good bubble-head down.

This collection features another five animations in the usual Steve Packer-style, with a swinging-logo intro to start things off. Rather unsurprisingly, there are another three Chuck clips, with the round-headed hero plunging into the depths once more in *Aqua-Chuck 2* (this time he's trying to swim against a strong undercurrent), scaling the heights in *K2 Chuck* and taking part in a classic Jeff Minter game in *Ancipital Chuck*.

To round off the disk, Steve has created a new character which could very well feature in future *Classy Animation*. A blonde bob, a handbag and a superhero cape are brought together in Peroxide Girl! The bionic bimbo (as she is billed) could be the next PD cartoon star (look out Chuck).

Every cartoon featured on the disk is based very much on the usual *Classy* style, with each one being loaded by selecting a number on the keyboard. Steve's cartoon style is (as ever) superbly drawn and wonderfully cute, which may come as a surprise to people who only picked up on his work after the release of the dark and foreboding *Optimum Pressure Crisis* demo; the basic style of artwork is in the same mould. so whether you're a fan of Steve's sci-fi clip or, more likely, you've enjoyed the earlier Chuck cartoons, then you should make no bones about adding this to your collection.



Steve introduces a new character – the Bionic Bimbo, who is all set to star in future *Classy Animations*

Chuck becomes trapped in a strange version of a Jeff Minter game – watch out for weird mammals

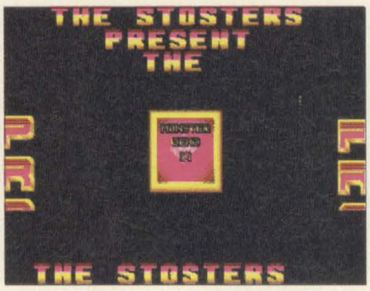
IN BRIEF

Type	PD
Author	Steve Packer
Requirements	512K
Disk Number	H692
Available from	NBS, 1 Chain Lane, Newport, Isle Of Wight PO30 5QA ☎ 0983 529594

AMIGA 81%

The Monster Demo II

It's the lurid pink and yellow colour scheme again! Pass my shades before my retinas melt!



More rather lurid colours and a wayward whizzy line comprise the menu screen

Although *STOS* is an undoubtedly powerful system, the majority of demos created using it have tended to appear in rather a rough fashion in the past. Coding team the STOSters has been hard at work with the package to try and come up with something a little more polished, and the results have appeared in the form of *The Monster Demo II*.

The intro simply features a *Monster Demo* logo and a scrolling message, with some jumping bars in the middle of the screen cavorting about in time with the music. After this, the menu screen appears, which seems to have a fixation with the colours pink and yellow for some reason. Still, it moves smoothly enough, so why complain?

The first demo displays a rather odd winged beast armed with a whip and a deadly-looking sword (I certainly wouldn't like to bump into him in a dark alley late at night) before some strange fan-shaped line formations start to fill the screen, producing a weird Moire pattern. The effect is quite interesting in an odd kind of way, but the limited colour-ranges tend to make it look somewhat dull after a while.

The next section is a little boring. The majority of the screen is taken up with *STOS* and STOSters logos, with some bouncing shapes and a whizzy line to liven things up. The music doesn't really add anything either, being the usual 'blap-bleep' affair.

The third part continues the STOSters' fascinating colour scheme, decked out in more of those fabulous pinks and yellows. Why this strange combination is a mystery (and where did these guys learn about art).

If the colours in the third part weren't bad enough, the fourth section contains a really awful palette. The big logo and confusing scroll don't help either! However, the music backing the section has an extra something lacking in other parts, so it's entertaining enough just for that.

The last part is another rather disappointing section. There is little in the way of impressive graphics (just a yellow-squared screen, a couple of animated logos and a small scroll) and the music is rather thin and tinny. Still, it was put together in *STOS*... No, on second thoughts, it's just lame.

The Monster Demo is a strange little beast. It starts off rather well, looking polished and diverse, but then loses its way somewhat. Having said that, it shows a lot of promise for those putting together demos in *STOS*, so maybe some more wide-ranging disks will appear soon.

The wibbly, multi-coloured snake makes another appearance on the *Monster Demo II*. What's he after? His own TV series?

IN BRIEF

Type	PD
Author	STOSters
Requirements	512K
Available from:	

The STOSters, Bramble Cottage, Cress Green, Eastington, Stonehouse, Glos GL10 3BG ☎ 0453 823088

ST 58%

PD on video

How many times have you wondered exactly how a utility is going to operate before you try it? Or, likewise, perhaps you have wanted to see part of a demo in action (rather than just seeing it on a static page) before making up your mind. And just think how annoying it is to see the latest whizzy animation disk only to discover that you'll need three megs to run it!

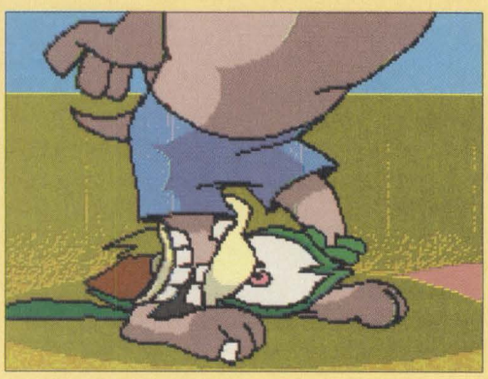
Well, James Hannigan at Media Machine has come up with a good idea. PD videos! Using a range of video and music equipment, James has put together a couple of videos for Prodisc PD. The venture seems to be quite a success so far, and James hopes to release further videos soon (including such titles as tutorial tapes for *Music X* and *Deluxe Paint*). At the moment, two videos are available, so here's a brief description of each...

Prodisc Catalogue

Price: £3.95

Instead of circulating their library catalogue on a disk simply containing a list, Prodisc has put together a video to show you exactly how everything looks on screen. No longer do you have to scratch your head and wonder what you're letting yourself in for – now it's available on screen!

The video starts off with a film-like corporate introduction, which fades away to reveal lists of Amiga programs available from the library. A pointer moves around the lists of demos, slideshows, animations and utilities, selecting a title every now and then in order to give you an example of a particular program. A short clip of the demo or utility in action is then shown to give you some idea of how it appears on screen, thus saving you the bother and frustration of getting hold of a disk only to find out that it isn't the one you thought. A very good idea which works rather well.



Now you don't even have to have an Amiga to watch Eric Schwartz's animations – just a VHS video player

The Best of Eric Schwartz

Price: £4.95

In addition to putting together a detailed and interesting catalogue, Prodisc has decided to widen the audience for the Amiga animation master himself, Eric Schwartz.

The Best of Eric Schwartz contains a number of his animations, right from the earliest *Aerotoons* clips all the way through to the satirical *Gulf War Conflict* cartoon. And as an added extra to the plane clips, the tape includes the *Anti Lemmin' Demo*, *Amy vs Walker 2*, *At the Movies 2*, the *Road Runner* animation and both *Flip the Frog* cartoons. So, all in all, there's quite a bit of entertainment, really (more than the usual cartoon compilation vids, anyway).

The animations have all been recorded well, and some of them have actually had new sound added using professional synthesisers, which gives the whole venture an even more polished and professional feel.

The fact that the animations are on video also means that they are not just limited to Amiga owners with hefty amounts of memory – anyone with a VHS video player can watch them. So, for anyone who likes cartoons, this is an absolute must!

Both of these are VHS videos, and are Available from

Prodisc PD, 81 Middleton Hall Road, Kings Norton, Birmingham B30 1AG ☎ 021 682 1450

500 Things – I'm Jesus, I'm God, I'm Satan

With all the rehashing of popular tracks and lack-lustre tracker tunes that tend to proliferate the PD demo scene, a music disk with some originality comes as a welcome break. Nic Cusworth has just such disks, ignoring the current trend for simply hammering out sampled renditions of the latest rave hits in favour of a more individual style.

If any of you out there are familiar with bands such as Ministry and the Thrill Kill Kult, then the title of this demo will no doubt have a familiar feel. And indeed it should, since Nic produces music of a similar style under the name *500 Things*. For his latest release, Nic has put together two tunes using the *Oktalyser* eight-track music package.

Nic Cusworth – Amiga underground star

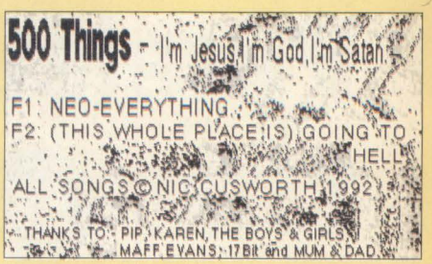
As you'd expect, Nic Cusworth is not a fan of the usual pop music that you hear in the charts. For *I'm Jesus, I'm God, I'm Satan* his influences incorporate a much darker side of the music scene, mainly noise-metal band Godflesh and underground thrashers Pitchshifter.

The samples on the demo come from a diverse range of sources, predominantly vocal snatches from the film *Hardware* and guitar feedback noise from Pixies records. Nic's primary aim in using this kind of sound is to prove that the Amiga is capable of a much harder sound than the usual tracker demos to be found in the public domain.

Nic hopes that future *500 Things* releases may go even further into the field of industrial noise, as well as attempting to put together whole hardcore-industrial demos with flash-edit graphics and music combining for total sensory overload. Let's hope that it widens the scope of other PD music creators to provide a much more interesting Amiga music scene.

The first tune, *Neo-Everything*, begins with a piece of sampled megaphone rhetoric, which then rips into a hard, industrial-sounding bass and drum riff. Later, the track blasts the listener with layers of distorted radio noise and metallic percussion samples, producing one of the hardest pieces of industrial techno-thrash you're likely to hear on your Amiga. The second track, *(This Whole Place is) Going to Hell*, is less abrasive than the first, going for a steadier dance groove in the style of MC 900 Ft Jesus' first album, *Hell with the Lid Off*, from the dub rhythms to the staccato guitar lines.

It's nice to see that people are still working with a sense of originality in the Amiga music scene, rather than just ripping off other artists or producing the same old background muzak. Nic includes a document on the disk to explain his influences, but none of the names cited will come as a surprise to fans of this style of music! The only criticism is that the accompanying graphics consist of a single black and white screen of an embossed dollar sign, overlaid with the song titles. Maybe a harsh, industrial picture,or pseudo record sleeve for each song would have been better. However, the demo stands up on its musical merits alone. If you want a change and like your music with a harder edge, then get this disk as soon as possible.


500 Things - I'm Jesus, I'm God, I'm Satan
F1: NEO-EVERYTHING
F2: (THIS WHOLE PLACE IS) GOING TO HELL
ALL SONGS © NIC CUSWORTH 1992
THANKS TO: PIP, KAREN, THE BOYS & GIRLS, MAFF EVANS, 17Bit and MUM & DAD

A bleak image to back the harsh, grinding beats of Nic Cusworth's latest output. Just add strobes

IN BRIEF

Type	PD
Author	Nic Cosworth
Requirements	512K • Not Plus compatible
Disk number	1782

Available from:
17-Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH
☎ 0924 366982

AMIGA 89%

The Music Wonder

There's more than one way to approach a music demo, and this disk from Offbeat takes a different approach to the *Digi-Music Demo* (reviewed on page 54) in that the tunes are (for the most part) put together using the ST's sound chip.

The intro screen is fairly impressive, with a nice chequered pattern being drawn up before the disk's title appears along with an *Offbeat* logo. The music that backs up the screen isn't so hot, though; it's the same kind of thing that has appeared on the front end of a number of demo disks, and so doesn't smack much of originality.

Doesn't this screen remind you of the opening credits of 60s films? No? Well, it must just be me then. Maybe I'd better lay off the Coca Cola

Once the demo has loaded properly (after you select one of the three options on a menu screen) things get a little more interesting. The first part allows you to select a number of tunes from a scrolling menu, but these either consist of songs already heard on other demos or thin, farty tracks that try to sound bassy and doomy, but just end up sounding flat.

The Digi section of *The Music Wonder* features some very doom-laden tracks. Just look at the titles for a start!

The next section contains a host of sound chip tunes, all accessed by highlighting your choice using the cursor keys. There is a massive list from which to choose, with potentially hours of listening. However, as you scroll down the list, it becomes apparent that the majority of the tunes have been taken from games (the list of sounds and tunes from *Turrican 2* is phenomenal). Having said that, however, some of the original tunes are well worth listening to (particularly the darker-sounding *Go for the Gunhed*). If only more of the demo was taken up by this kind of stuff!

The last section – the *Delta Force* screen – is probably the most interesting – musically speaking, anyway. The tune starts off with some deep, booming bass notes to evoke a sombre atmosphere, followed by a rapid-fire dance rhythm, awash with static noises, percussion sounds and vocal samples. A truly marvellous effort, indeed!

On the whole, *The Music Wonder* is quite an interesting disk. Occasionally, the music is a bit disappointing, since a lot of the tunes have already been heard before, either on games or other demos. Also, the tune that is played as you load sections doesn't fit in with the somewhat darker feel of the rest of the disk. Still, the decent pieces of music found on the disk make it well worth investigating. After all, it hardly costs an arm and a leg, does it?

IN BRIEF

Type	PD
Author	Offbeat
Requirements	512K
Disk Number	3084C

Available from:
Floppyshop ST, 45 Provst Graham Avenue, Hazelhead, Aberdeen AB1 8HB
☎ 0224 312756

ST 72%

Persistence of vision – 106

That lot at POV have certainly been busy. Three compilations from the team have arrived at the *Public Domain* offices over the last few weeks. But as we all know, quantity doesn't mean quality, so what balance has POV managed to strike?

Volume 106 has a fairly well drawn menu screen, with a metallic 106 logo bouncing across the menu listing, backed by a picture of melting disks over a raging inferno. A bright and colourful piccy to get things started – just what we want to see!

The first demo, *Omega*, is in two sections. The first screen comprises two Omega logos. One rotates at the top of the screen, while the bottom one colour-cycles in a most gaudy and eye-searing fashion. When you get bored of this and hit the reset button, a face appears backed by a sampled scream, before a rotating message appears to tell you that you are about to see the Omega demo for proper. Unfortunately, all it consists of is a purple picture of a girly robot accompanied by horrendous versions of wartime sing-along tunes!

The second demo, strangely titled *Shtroumph*, is more ambitious. The intro is a cartoon dog face, backed up with a few raster bars and a reedy tune. Not too much on the graphics front appears in the next section, which is just a couple of logos for Pendragons and Bushwhackers backed with a sampled version of the C64 *International Karate* music.

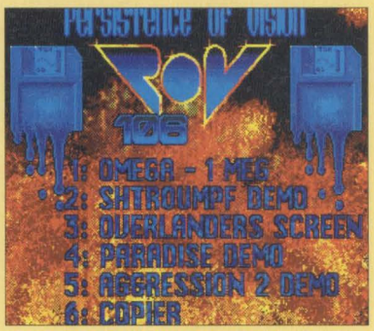
Strangely enough, the third (and middle) section seems to be nothing more than a scrolling credits list. But why at this point? And in the next screen the music crackles, glitches and is generally out of time. And if this isn't bad enough, the graphics mess up quite badly as well!

The following section's graphics employ a dreadful use of colour to show the screens. However, the music is better than on earlier sections, comprising atmospheric sounds (if a bit) in the style of Jean Michel Jarre.

The last few demos simply consist of a bad picture with an unreadable scroll, a fairly unimaginative scrolling floor, and a string of sprites demo from Paradise. Now come on!

This disk isn't one of POV's best. Some of the sections shouldn't have been put out at all, since they blatantly don't work! When you're distributing collections of demos, simply putting a message at the beginning of corrupt sections saying, "this one didn't work when we got it," isn't good enough!

What a mess! It doesn't help when the music stutters and the screen glitches all over the place



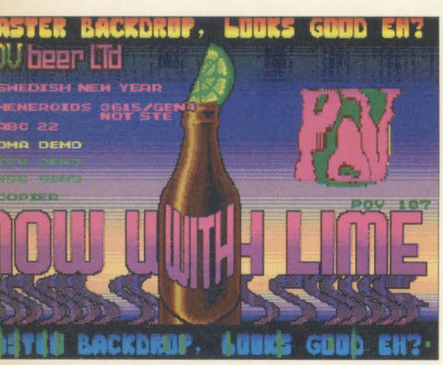
If this is supposed to give the impression that the stuff on the disk is hot, then it's lying

IN BRIEF

Type	PD
Author	Persistence of Vision
Requirements	Omega demo requires 1Mb and mono
Disk number	POV106
Available from:	Prophecy PD, 390 Coulsdon Road, Old Coulsdon, Surrey CR5 1EF ☎ 0737 554536

ST 49%

Persistence of vision – 107



Staying for a Lager and lime? Well, maybe not, but you can always load the demos instead

This intro to the *Swedish New Year* demo boasts some famous elements, but who's the girl in the metal costume?

Volume 107 in the *POV* collection is a little more wide-ranging than some of their other disks, since it contains more demos than usual. There are six sections, with a copier for backing up the demos tacked on the end. The intro section isn't one of their best front-ends, consisting of a rather poorly-drawn picture based on an obscure beer joke and a duff tune.

The first proper section is pretty extensive in itself, being another in the line of *Swedish New Year* demos from Sync. The demo loads up with a rather well-drawn picture, combining illustrations of an eagle, one of the famous Sexyrobot shots, a dynamic Atari logo and Garfield to produce an impressive opening screen.

The demo consists of three sections. The first sub-section is based on a tired, old technique, with some raster bars whizzing up and down the screen behind a logo which rotates between the name Sync and four pictures of the Bitmaps' Eric Matthews from the game *Xenon*. This is accompanied by an uninspiring piece of music.

The second section starts off in quite an amusing way, pulling up a screen full of static before the, "They're here!" sample from *Poltergeist* is played. Unfortunately, it goes downhill after this, simply leaving the static up while a looped sample from *Don't Make Me Wait* plays. And it looked so promising, too.

The third section is a lame affair. All that appears on screen is a poorly-drawn game-style border surrounding a wobbly Atari logo, with a scrolltext and a couple of LED bars at the bottom. Incidentally, the LED bars draw your attention to the music, which isn't worth drawing attention to anyway!

For the most part, the other demos available on this compilation are your usual, run-of-the-mill, scrolly messages and bouncy logos variants. And what they all have in common is a complete lack of originality.

For the most part, *POV 107* is a fairly lack-lustre compendium of unoriginal demos. The only thing that makes it worth investigating is the *Swedish New Year* demo. Although this disk may have one of the largest collections of demos to be found in the POV series, none of the sections is likely to be loaded into your ST more than a couple of times.

IN BRIEF

Type	PD
Author	Persistence of Vision
Requirements	Not fully STE
Disk number	POV107
Available from:	Prophecy PD, 390 Coulsdon Road, Old Coulsdon, Surrey CR5 1EF ☎ 0737 554536

ST 51%

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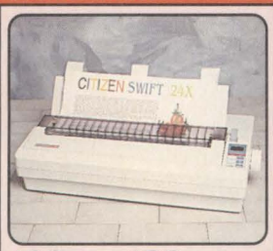

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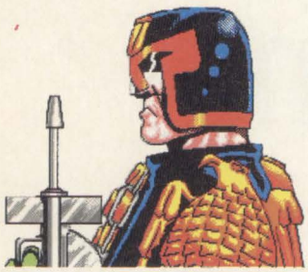
Persistence of Vision – 102



And yet another compilation from POV! This one starts off with the usual style of menu screen, complete with lots of raster coloured letters and sine-wave text backed up with a bleepy tune. To load up the demos, all you have to do is press a key from one to five, with key six loading up a copier (useful if you want to copy one of the demos).

The first demo is ABC's *Hand on You Heart* demo, which is extremely sickly. The graphics consist of some lurid pink hearts and a scroll-text moving across a black rectangle, all backed up with a scratchily-sampled and horribly re-edited version of Kylie's song of the same name. NEXT!

Sewer Software's *Soundtracker* demo is rather better, with a nice metallic logo and font flanked by scrolling messages on the sides of the screen. The three tunes vary in quality, but *Scoopex* is pretty good, with a lazy rhythm backing up the solid groove. The combination of atmospheric vocal samples, fretless bass and Eastern wind instruments go together to make a dreamy tune with a laid-back feel.

Some bouncy 3D shenanigans from DNA. Maybe they'd better have a sit down for a while – they're obviously working too hard

The third demo is a slideshow put together by Machine System Data of pictures drawn by ST artist, Vaxel. The demo contains art from various sources, covering elements such as *Batman*, *Judge Dredd* and *Garfield*. Some of the pictures are extremely good, but are let down by the odd dodgy screen.

The last two demos are pretty lame, comprising the old, tired, parallax floors and backgrounds, overlaid with strings of sprites. This is a bit of a shame, since the only demos worth watching are let down by some mediocre pieces of coding.

IN BRIEF

Type PD
Author Persistence of Vision
Requirements 512K
Available from
Prophecy PD, 390 Coulsdon Road, Old Coulsdon, Surrey CR5 IEF ☎ 0737 554536

ST 66%

The best of the rest • The best of the rest

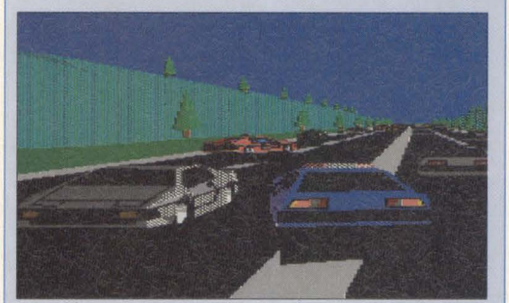
I wonder how many demos we covered in our first seven issues? Well, you can count them if you want – sounds too much like hard work to us. But here are the ones that scored the best, anyway...

ST

1 A Little Music Demo Issue 1 92%
Riverdene PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 0734 452416
A collection of eight excellent *Soundtracker* tunes covering a wide variety of styles.

2 Ooh Crickey, What A Scorcher Issue 2 90%
Riverdene PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 0734 452416
An impressive demo from the Lost Boys that combines humour, decent music and a selection section requiring you to fly a spaceship through a 3D landscape.

3 The Run Issue 1 84%
MPH, 10 Chandlers Court, Eaton, Norwich, Norfolk
A superb piece of 3D ray-traced animation from the master, Tobias Richter. A high speed car chase along some American freeways with great attention to detail.



Detail is so good in *The Run* even the break lights come on!

4 Mental Hangover Issue 6 81%
State 808PD, 3a Old Lanark Road, Carluke, Scotland ML8 4HW
An ST conversion of Scoopex's *Mental Hangover* demo for the Amiga. Wild bobs and vectorshapes backed up by an impressive tune constructed from samples.

5 Transbeauce Demo II Issue 2 81%
Riverdene PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 0734 452416
An entertaining selection, of which the *Art of Code* demo is the standout – excellent music accompanied by an animation of a band thrashing away at their instruments.

6 Mr Benn Demo Issue 1 80%
Caledonia PDL, 250 Oldtown Road, Hilton, Inverness IV2 4PT
Relive those childhood memories. The theme music plays, accompanied by a series of quality digitised images. Includes a *Rocky and Bullwinkle* demo as a bonus.

7 TWM Module Disk 11 Issue 2 79%
Riverdene PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 0734 452416
Combining clear sound with powerful tunes, this is well worth checking out.

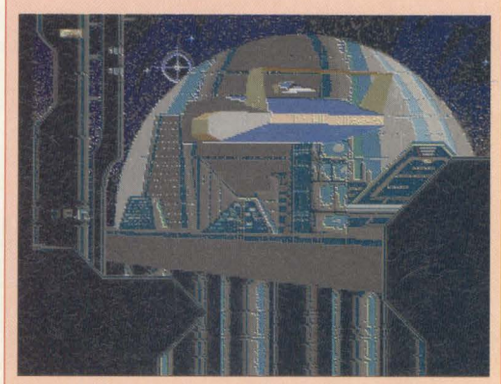
8 Hardcore Dancefloor Issue 4 78%
State 808 PD, 3a Old Lanark Road, Carluke, Scotland ML8 4HW
A collection of tunes put together using samples from techno tracks such as *Quadrophenia, Charly* and *Night in Motion.*

9 Things Not To Do Issue 1 78%
Riverdene PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 0734 452416
Strange animated clips of some karate fighter. Quite funny in a crude way!

10 ULM New Year Demo Issue 2 78%
Rust PDL, 361 Ordanance Road, Enfield, Middlesex ☎ 0992 717828
Mainly pretty dodgy collection with one major saving grace. The *Zoolook* demo, based on the Jean Michel Jarre track is really rather good.

AMIGA

1 Odyssey Issue 4 95%
NBS, 1 Chain Lane, Newport, Isle of Wight PO30 5QA ☎ 0983 529594
Five-disk epic of galaxy-spanning action with a variety of animation styles and music, all pretty impressively done. The dogfight is stunning.



A galaxy-spanning tale is related on five disks in *Odyssey*

2 Robin Reliant Turbo Challenge Issue 4 95%
4th Dimension, 94 Breedon Street, Long Eaton, Nottingham NG10 4FE
A witty little piece of animation which reproduces the attract screen from the top-selling game *Turbo Challenge II*, replacing the Lotus with a Robin Reliant.

3 Anti Lemmin' Demo Issue 1 93%
17 Bit Software, 2/8 Market St, Wakefield WF1 1DH ☎ 0924 366982
Superlative animation from Amiga demo maestro extraordinaire Eric Schwartz. Watch the furry little vermin from the famous game indulge in Rambo-style action.

4 Manic Raves Issue 1 93%
17 Bit Software, 2/8 Market St, Wakefield WF1 1DH ☎ 0924 366982
Eight songs on two disks that are so darned good they'd sell by the truck load if they were sold on 12-inch record and played endlessly at your local rave.

5 At The Beach Issue 6 91%
PD Soft, 1 Bryant Avenue, Southend-On-Sea, Essex SS1 2YD
Can nothing stop Eric Schwartz's dominance of the chart? Fun on the beach this time, as Moondoggie and Flip the Frog both try to woo Clarisse the Cat.

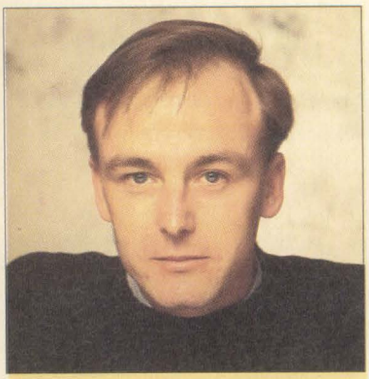
6 Gulf War Conflict Issue 3 91%
PD Soft, 1 Bryant Avenue, Southend-On-Sea, Essex SS1 2YD
Another masterpiece from Eric Schwartz. The subject matter might be past the sell-by date, but the humour, animation and caricature of Saddam are great.

7 Wildfire Megademo Issue 3 91%
PD Soft, 1 Bryant Avenue, Southend-On-Sea, Essex SS1 2YD
Packed with some really powerful, pounding music and acieeed-style graphics, this demo is a real winner from the Wildfire coding team. Turn up loud.

8 Time Flies Issue 2 91%
Amiganuts, 169 Dale Valley Road, Hollybrook, Southampton
Superb piece of 3D ray-tracing as a clock flies at high speed around a room.

9 Hardwired Issue 4 90%
NBS, 1 Chain Lane, Newport, Isle of Wight PO30 5QA ☎ 0983 529594
Two-disk compilation containing a progressive series of sections unveiling new and wonderful techniques – space battles, vector demos, scrolls, they're all here.

10 Mars Flight Issue 1 90%
17 Bit Software, 2/8 Market St, Wakefield WF1 1DH ☎ 0924 366982
Excellent 3D animation of a spaceship flying over a futuristic city on Mars, complete with skyscrapers, and then coming in to land at a spaceport.



Business & Applications

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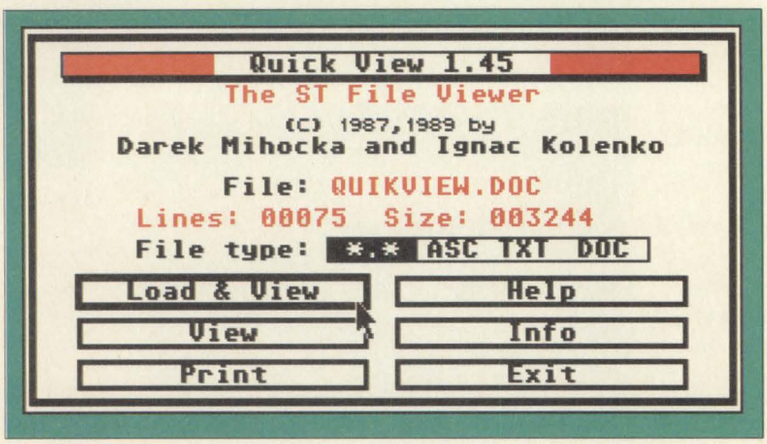
Well? How d'you like the new format? Here on the business pages it gives me a chance to really get my teeth into the software under review, the better for you to determine its worth. Fewer reviews perhaps, but far more depth and all the more pictures, don't you think?

Summer's almost with us once again, a time when computers are traditionally abandoned in favour of healthier pursuits, but there doesn't seem to be any let-up in the amount of new software falling on to my desk – particularly for the Amiga. Lots of new goodies and several important updates including the marvellous *BizCalc* (reviewed this month).

Another welcome update which I'll feature next month is the latest copy of *LyneWriter* (previously reviewed in issue six). The new version has even more features and removes one or two important bugs. It's perfect for anyone with a tricky printer to set up, or those who want to address envelopes and can't get their software to perform.

Another quality collection on review this month, *Pay Up!*, is a cracking invoice package for the PC that's cheap to register too. Amiga accounting hasn't been forgotten; *Clerk* works well enough and is entirely free. And there's the off-beat *VidBase* for ST shopkeepers with a video collection to maintain. Something for everyone, in fact, who uses a computer as part of their business.

Buying business software doesn't have to bite huge chunks from your profits. As Jerry Glenwright can tell you, PD and shareware provides everything you need at wallet-friendly prices...



The program does its stuff from this main screen. The dialog buttons are used to locate and open text files, print them and get help – it all makes reading documentation files much less of a chore

QuikView

Probably one of the biggest complaints associated with PD and shareware is that the documentation files are shipped as electronic files on disk. To read them, you've got to lay waste to forests of paper having to print the files, or else sit in front of a maniacally flickering screen, attempting to pause rapidly scrolling text at just the right moment. That's why so many shareware programmers offer printed manuals as an inducement to register.

There is an alternative, however, and its name is *QuikView*.

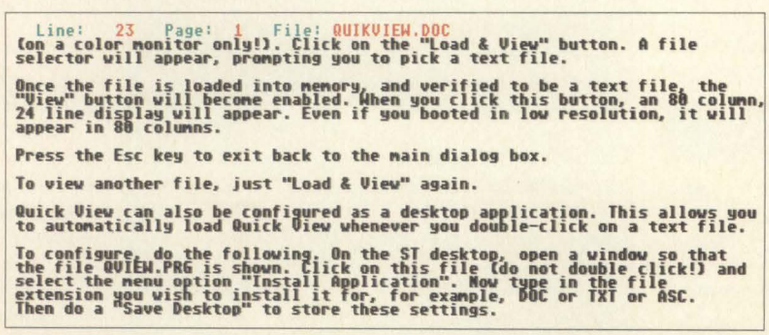
Boot a copy of *QuikView* and you've got the ability through your mouse pointer to move back and forth through files, print selections of text and generally *enjoy* documentation!

There's no installation to speak of – at least, unless you want to install it, that is. What do I mean? Well, you can use *QuikView* as is, straight from the distribution disk, by simply double-clicking its icon. The program displays a dialog of options including locating and opening a text file, printing a file, changing the search options, summoning help and so on. To view a text file, all you have to do is click on the Open/View button, locate a suitable file and it's displayed in 80 columns (whatever the resolution you open the program into) ready for you to read.

Alternatively – and this is where *QuikView* gets dead good – you can install the program as a Desktop application so that any time you click on a text file, *QuikView* is automatically opened as a viewer for it!

Sounds complicated? Not a bit of it. Click once on *QuikView*'s icon to select it, then select Install Application from the menu bar. Finally, assign TXT, DOC or ASC to the installation. Now whenever you double-click a text file with the chosen extension, *QuikView* opens automatically.

On-line help completes a neat little application which fans of PD and shareware will use over and over again. Register and you'll receive a full collection of Darek Mihocka's *Quick* applications and utilities (more than half a dozen quality programs).


Line: 23 Page: 1 File: QUIKVIEW.DOC
(on a color monitor only!). Click on the "Load & View" button. A file selector will appear, prompting you to pick a text file.
Once the file is loaded into memory, and verified to be a text file, the "View" button will become enabled. When you click this button, an 80 column, 24 line display will appear. Even if you booted in low resolution, it will appear in 80 columns.
Press the Esc key to exit back to the main dialog box.
To view another file, just "Load & View" again.
Quick View can also be configured as a desktop application. This allows you to automatically load Quick View whenever you double-click on a text file.
To configure, do the following. On the ST desktop, open a window so that the file QVIEW.PRG is shown. Click on this file (do not double click!) and select the menu option "Install Application". Now type in the file extension you wish to install it for, for example, DOC or TXT or ASC. Then do a "Save Desktop" to store these settings.

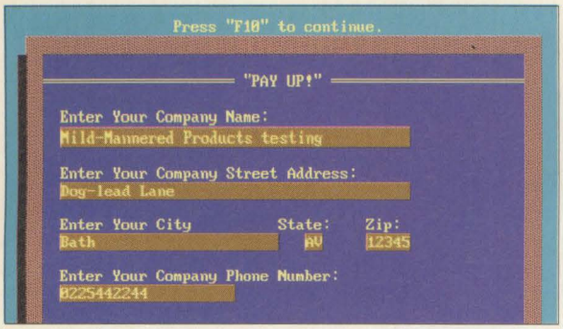
***QuikView* displays text in 80 columns whatever resolution you boot the program into. The cursor keys move you back and forth through the text file and ESC returns you to the main screen**

IN BRIEF

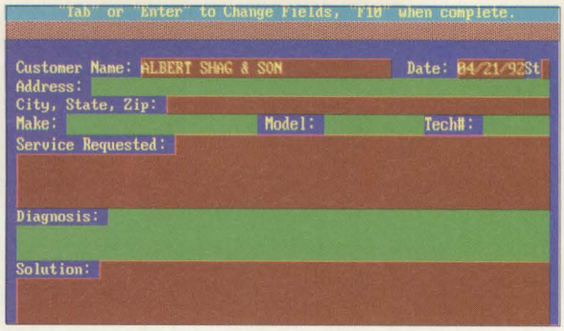
Type	Shareware
Author	Darek Mihocka
Requirements	512K
Disk Number	U69
Registration fee	$30 (£18)

Available from
MT Software, Greensward House,
The Broadway, Totland,
Isle of Wight PO39 0BX
☎ 0983 756056

ST 85%



The invoicing process begins with you entering your company's name, address and telephone number – these all appear on printed output



Uncluttered invoices are a pleasure to use, and the program can lift customer details from existing invoices if required

Pay Up! 3.0

Accounts can be a nightmare, and so can some accounting packages. But here's one that actually makes money matters simpler...

Are you looking for a startlingly simple job assignment and invoicing system which never gets in your way, yet has the power to provide perfect accounting? This might sound like a line from a washing machine ad, but for once it's not just spiel because this is exactly what *Pay Up!* has on offer. Whereas other accounting packages often confuse with their custom methods of maintaining invoices, *Pay Up!* features three straightforward accounting choices, each orientated towards a particular type of business.

To make the most of the software, decide which type of accounting your business needs, and make a selection. From then on in, it's straightforward bill generation every time!

Pay Up! is shipped as a zipped archive complete with *PKUnzip*, the utility used to reconstruct it. Just create a directory on your hard drive, wang in the distribution floppy, type:

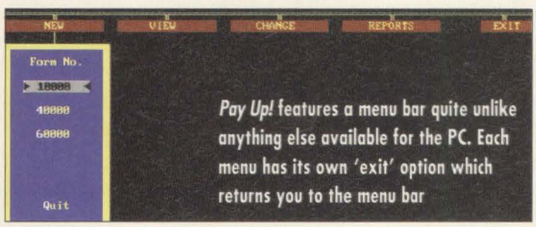
```
PKUNZIP PAY3A C:\DIRECTORY
```

and press Return. Seconds later, the dozen or so necessary files are ready and waiting. There's no other installation procedure, the program is now ready to go to work (and how's that for a refreshing change?)

Custom environment

Pay Up! is entirely menu-driven. Coding team Q&D Software Development has produced its own custom menuing system which is markedly different from others I've seen, yet immediately obvious in use. There's a standard menu bar bearing four options: New, View, Change and Reports. Each is accessed using the cursor keys, but pull one down and you'll see that each has a separate Exit option which moves you back to the menu bar with the New option at the right highlighted. Unusual, sure, but it works well in practice.

The first time you use *Pay Up!* you're invited to enter company details such as name, address and telephone number, and it's here that Q&D has decided to protect its investment. Registered users have only to enter their details once, whereas users of unregistered copies must enter their company details every time – a lengthy and frustrating process when it's repeated for the twentieth time! (But then, *you* always register anyway, right?)



Enter your details, and you're ready to start invoicing. *Pay Up!* doesn't attempt to replace your accounts package, but merely provides an alternative invoicing method. To that end, the program supplies three scenarios known as 10000, 40000 and 60000. The first and last scenarios are geared towards those businesses which provide labour as well as a product; garages, plumbers, electricians and so on – the *service* industries. The 40000 scenario is for businesses orientated towards selling products only.

If you're involved in a service industry, choose 10000 or 60000. Both options provide job sheets for technicians as well as invoices which show labour costs and the charges for products. In addition, option 10000 generates 'work orders' which can be signed by customers when work is completed, providing a further record for your files (and acting as an important check on customer satisfaction).

Easy invoicing

The work order is fully integrated with the subsequent invoices generated for the same job. When you've completed a work order, the software asks whether you'd like to produce an associated invoice. Answer yes, and *Pay Up!* lifts all the details from the work order including the customer's name and address, and any work descriptions. All you have to do to complete the invoice is add a price!

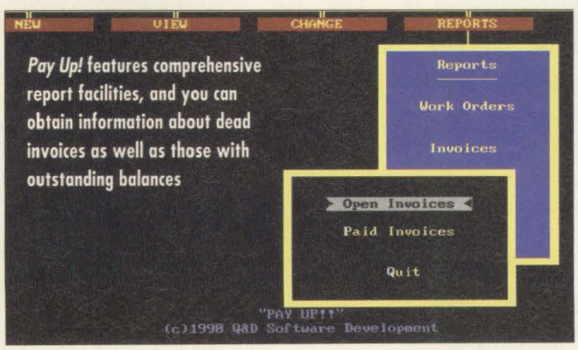
Scenario 40000 provides straightforward product invoicing. You sell some item or other, hack the details into the invoice together with VAT and any sundry charges, and *Pay Up!* calculates the totals and generates an invoice. Full report facilities are available from the program which can be displayed on-screen or dumped to a printer.

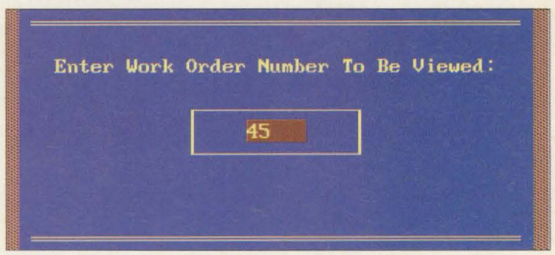
The Reports menu offers reporting on work orders or invoices. Choosing the latter option enables you to determine exactly which invoices are now 'dead', and which are still being processed, plus the amount of money outstanding on each. Other menu options enable you to browse through all the invoices and work orders stored in *Pay Up!*'s database, search for specific invoices and edit them.

Two-tiered registration

Registration comes in two flavours. Register for $69 (£36) and you lose the pop-up registration reminders and you only have to enter your company details once. You'll also receive a bound manual and technical support. Alternatively, $109 (£57) buys an upgraded 'professional' version, 3.10, featuring a customer database which is created automatically and maintained separately from the invoice database. This enables you to browse through your customers and mail-merge their details into other documents. There's a printed manual and telephone technical support with the professional version too.

Pay Up! is a pleasure to use. It combines the minimum of fuss coupled with the maximum of practicality. Well worth a look.



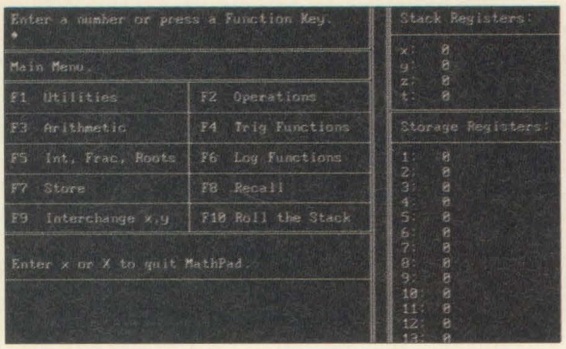


Flexibility in the form of Search and Edit facilities (each invoice is assigned a number) completes a package which is sure to make an efficient and welcome change to your existing invoicing software

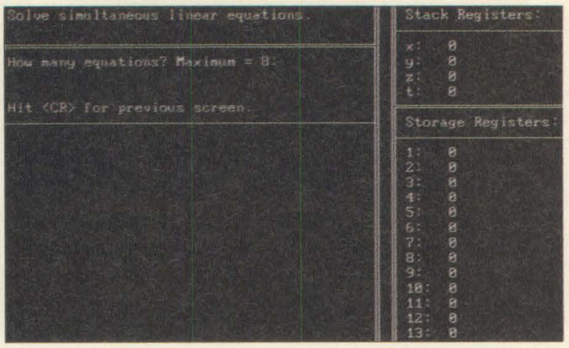
IN BRIEF

Type	Shareware
Author	Q&D Software Development
Requirements	512K • Hard drive
Disk number	6747
Registration fee	$69/$109
Available from	Ensign Systems, Freepost, London SE26 5BR ☎ 081 778 2871

PC 75%



The *Mathpad* main screen: at the right there are areas for stack and storage register manipulation and at the left, ten buttons providing access into the program's further features ad functions



The bottom left corner of *Mathpad*'s main screen is known as the 'Small Window'. Nothing to do with *Play School*, it's here that the program prompts for information or displays options selected with the buttons

Mathpad

Got some sums that are a little more taxing than two plus two? Then dig out Mathpad, the scientific calculator to out-calculate all others...

When I read the blurb about *Mathpad* in the catalogue – "...produced in 1987, and still the best around" – I thought that sounded like the typical advertising spiel of a company desperate to shift a few copies. But the assertion was an excellent way to arouse my curiosity, so I hauled out the disk and assigned it the requisite couple of hundred Ks.

And boy, was *I* surprised!

Mathpad is an excellent scientific calculator. The program simply *drips* with features and it's so clean and unfussy. Whereas programmers in the 90s have to work hard to give their wares novelty value (how else do you choose between the 5,000 word processors on offer?) Tim Pera, *Mathpad*'s author, had little competition back in the dark days of 1987, free-form programming followed, and the result is that of its type, the program *is*, "still the best around."

Here's just a little of what's on offer: stats functions including mean, standard deviation and variance; permutations and combinations; simultaneous linear equations (coefficient as well as inverse matrices); vector analysis including vector addition and subtraction; angle measure conversion (degrees to radians and vice versa); logs; and user-defined functions such as trapezoidal and Gaussian quadrature. What more could you ask for?

Unusually, *Mathpad* is shipped as an executable file; there's no dearchiving to perform before making full use of the program. Just open up a suitable directory on your hard drive and copy the half-dozen *Mathpad* files into it, switch to the directory, type:

```
MATHPAD
```

at the DOS prompt and press Return. Seconds later, the prettiest scientific calculator since Carol Voordeman hit TV appears on your screen.

Mathpad is controlled via a sequence of what the author describes as 'menus', but which nowadays are more usually described in more up-to-date terms like screens and buttons.

That is, there is a main 'menu' (ie, the main screen) divided up into an input area, stack and storage register areas, and ten sub-menus (or buttons) accessed with the function keys. There's also a small window known as the 'Small Window' which is where the program prompts for extra information should it be needed.

The working concept behind *Mathpad* is that you shouldn't really need to traverse unnecessary piles of program features before being able to perform some desired calculation. Hence the buttons and function keys. Decide what it is you want to do, open the program, select the required function by pressing an associated function key and do your stuff. Quitting *Mathpad* is as easy as brushing a fingertip over the X key and answering Y to the quit dialog.

The function keys provide pathways into trig and log functions, roots, percentages and so on, as well as number base change and a healthy collection of utilities.

These latter include decimal point fixing (ie, switching between the program's default double precision numbers to some other user-defined decimal point placing), stack and register manipulation, a screen redraw (who knows why, but it's there should you need it!) and a DOS shell.

That's right. Although the program doesn't run as a TSR, you *can* gain access to DOS for file and directory manipulation if needed.

Other features include 26 user-definable storage locations known as registers. To use these, press the associated function key and, when a list of the registers is displayed in the small window, select the required register and assign it a value. You can then use the register(s) in any subsequent calculations. It's a bit like an extended Memory function.

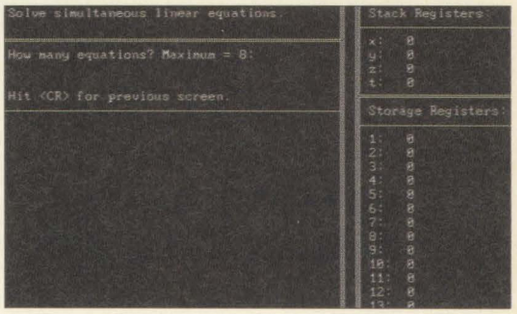
The program is accompanied by an excellent set of on-disk docs, fully indexed and ready to print (compare this with many others, which aren't formatted properly and waste reams of paper). Tim Pera steps through every operation available from within *Mathpad* so that you're never less than fully aware of just what his program can achieve.

OK, so no program's perfect and *Mathpad*'s particular downside is its inability to run as a TSR – I like to pop calculators up over existing applications. But for what's on offer, it's worth occasionally dipping into DOS to run the program.

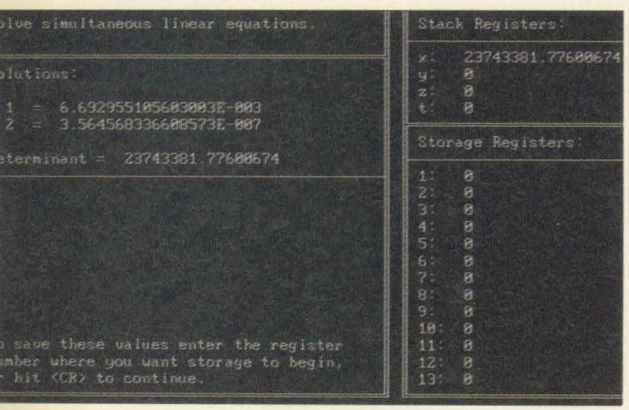
Twenty bucks registration (around £12) buys nothing more than a good time for the author with the right kind of gal, but then, he's entitled to some enjoyment for his hard work, right?

Alternatively, if you have a perverse interest in these things, you can bung $50 his way and receive the complete *Mathpad* source code.

A monster piece of software and one which contains a lot of thought and hard work. Many 'scientific calculators' are little more than the results of novice programmers dabbling with a new assembler. *Mathpad*, however, was designed to be used – install it on your hard drive and used it will be! Just the thing to work out all those lucrative accumulator winnings on a Saturday afternoon...



...and here are the results. You can elect to store each result in a register (to which you can assign a name) and use it in further equations, or simply return to the main screen



An enormous number of scientific functions are on offer. Here, *Mathpad* is about to jump through hoops by solving simultaneous equations...

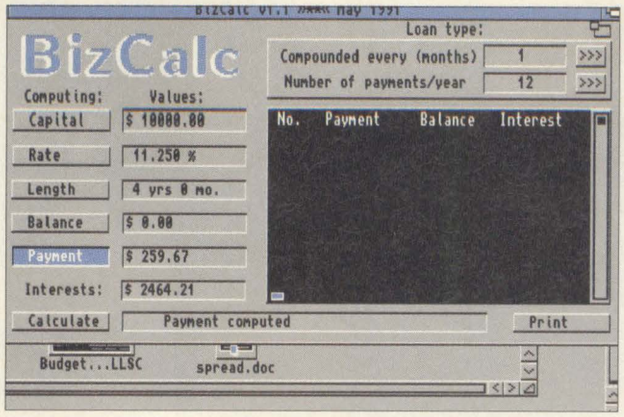
IN BRIEF

Type	Shareware
Registration fee	$20 (£12)
Author	Tim Pera
Requirements	256K
Disk number	ED2016

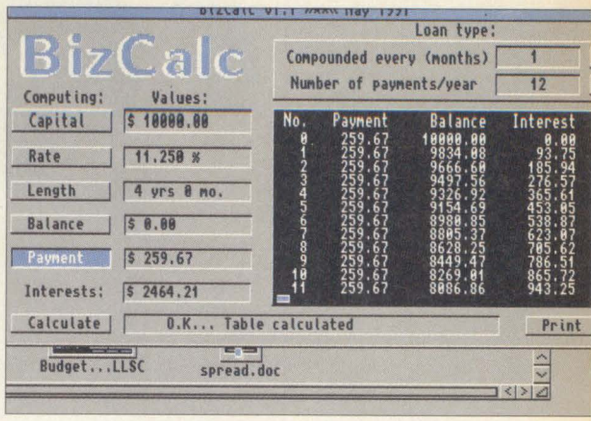
Available from
Wilkes and Son, Bunbury, Tarporley, Cheshire CW6 9PE ☎ 0829 260775

PC 85%

BizCalc



The *BizCalc* main screen: didja ever see anything quite as pretty? Financial information at your fingertips, where it belongs! It works fastest from the Amiga's Shell, but if that sounds daunting it can be run from Workbench



As well as the buttons and fields showing the initial figure, interest rates, balance and length of loan, *BizCalc* generates a complete table showing every payment (you can print it too...)

Loans... mortages... bills... Having trouble Keeping track of your money matters? Here's a calculator that could make life easier...

Previously known as *MortCalc*, *BizCalc* was ignored by many potential purchasers probably because they thought this all-purpose loan calculator was for mortgages only (that, or for undertakers working out suitable levies on the dead). So here it is: the updated, bug-removed, renamed calculator which can help sort out all those troublesome problems with finance houses, electricity companies, loan sharks and the like.

BizCalc is kitted out for use by the technical and non-technical alike. That is, you can run the program from the Shell using a vast range of command line options, or simply double click its icon and bring it up on the Workbench.

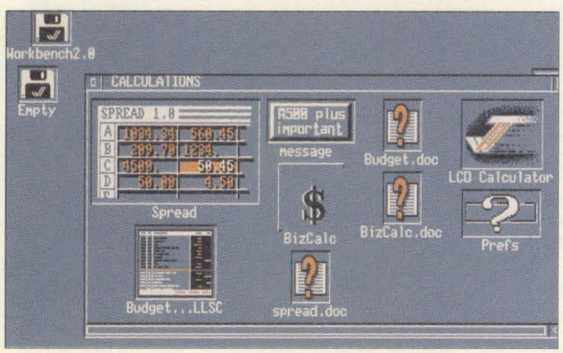
Elect to follow the former route, and you can select from seven options (or use all of them), ranging from essentials such as the principal figure and interest percentage rate, length of loan and payment frequency, to compound interest rate, payments per year, changing the screen output from the default six figures (non-rounded), even changing the default language from English to French!

The Workbench option

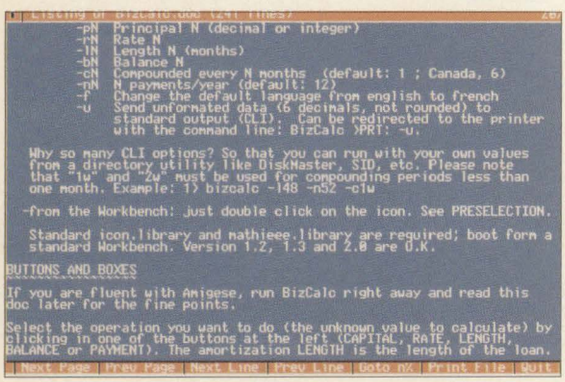
Fine. Those of you familiar with the vagaries of the Amiga's Shell can whip through a complex loan calculation in little more than a coffee break. This method significantly reduces the – already short – time the program takes to perform its stuff. If you don't want to dirty your digits typing commands, however, *BizCalc* is happy to do its stuff via the Workbench.

The first thing you'll notice is that there's no installation procedure which is incredible for a financially-orientated program such as this. Sure, there are a few libraries and other nasties in the system drawers that you have to move around if you want to set up a work disk, but nothing you actually have to step through to get *BizCalc* going. You can use the program as it comes straight from the distribution disk if required.

Double-click *BizCalc*'s icon, and you're regaled with a delicious screen display featuring neatly-drawn gadgets, comprehensive financial information covering every aspect of loan manipulation, and a standard menu bar enabling you to decide between personal and mortgage calculations (the latter, unfortunately, only useful for those living in the continental United States – ah, well, you can't have it all). You can also choose between printer or screen output.



An unusual (for this type of program, at least) Iconify feature provides full access to the Workbench and other programs while you are still using *BizCalc*. The program is reloaded by double-clicking this icon


-pN Principal N (decimal or integer)
-rN Rate N
-lN Length N (months)
-bN Balance N
-cN Compounded every N months (default: 1 ; Canada, 6)
-nN N payments/year (default: 12)
-f Change the default language from english to french
-v Send unformated data (6 decimals, not rounded) to standard output (CLI). Can be redirected to the printer with the command line: BizCalc >PRT: -v.
Why so many CLI options? So that you can run with your own values from a directory utility like DiskMaster, SID, etc. Please note that "1v" and "2v" must be used for compounding periods less than one month. Example: 1) bizcalc -l48 -n52 -c1w
-from the Workbench: just double click on the icon. See PRESELECTION.
Standard icon.library and mathieee.library are required; boot form a standard Workbench. Version 1.2, 1.3 and 2.0 are O.K.
BUTTONS AND BOXES
If you are fluent with Amigese, run BizCalc right away and read this doc later for the fine points.
Select the operation you want to do (the unknown value to calculate) by clicking in one of the buttons at the left (CAPITAL, RATE, LENGTH, BALANCE or PAYMENT). The amortization LENGTH is the length of the loan.
Next Page | Prev Page | Next Line | Prev Line | Goto n% | Print File | Quit

The program is accompanied by an excellent documentation file which explains every aspect of the program in everyday language. There's also a full list of the keyboard and command line shortcuts

Double-click *BizCalc*'s icon, and you're regaled with a delicious screen display featuring neatly-drawn gadgets, comprehensive financial information covering every aspect of loan manipulation, and a standard menu bar enabling you to decide between personal and mortgage calculations (the latter, unfortunately, only useful for those living in the continental United States – ah, well, you can't have it all). You can also choose between printer or screen output.

To perform a calculation, hack in your loan, chose a repayment figure and the span of the repayment, then click the Calculate gadget. Seconds later, loan-orientated facts and figures are pouring forth from the screen or printer. The program provides options for capital, rate, length, balance, compound interest and payment, and you can get the value of any one of these by entering values for the others.

Hard proof

For those who need a print-out of the calculations and results, clicking on the Print gadget brings home the hard copy. The feature is especially useful for anyone whose business it is to provide information about loans – you can simply hand the printed output to prospective debtor...er, *clients*.

Alternatively, it's possible to redirect the output to a file. This means that you can store data for lots of loan clients and recall it whenever you want – much easier than fiddling about with bits of paper!

There's an iconify feature so that you can temporarily shut down operation while performing some other task from the Workbench, then switch back into the program at a click of the mouse button. Surprisingly, considering the number of features and functions, the program uses only a small amount of RAM, so there's plenty left over for other applications.

Where to turn

Abbreviated on-line help is available at any time from the menu bar, and there's a fat doc file on disk stuffed with information about the program and getting the most from it. Other features include lashings of keyboard shortcuts, intelligent handling of 'rounding-down' errors, and lots of program defaults so amateurs to the payment game will still be able to make the most of what *BizCalc* has to offer.

Register with 15 Canada-bound dollars, and you'll get a copy of *BizCalc Professional*, featuring real-time calendars, a complete on-line manual and on-line configuration, extra file manipulation functions and more. Michel ends his on-disk docs with: "...if using *BizCalc* saves you money, please show me the colour of it". Funky!

It's fast, pretty and crash-resistant. Now all you've got to do is figure out how to get the program to break a few arms when the payments are late, and you've got yourself a loan-shark business...

IN BRIEF

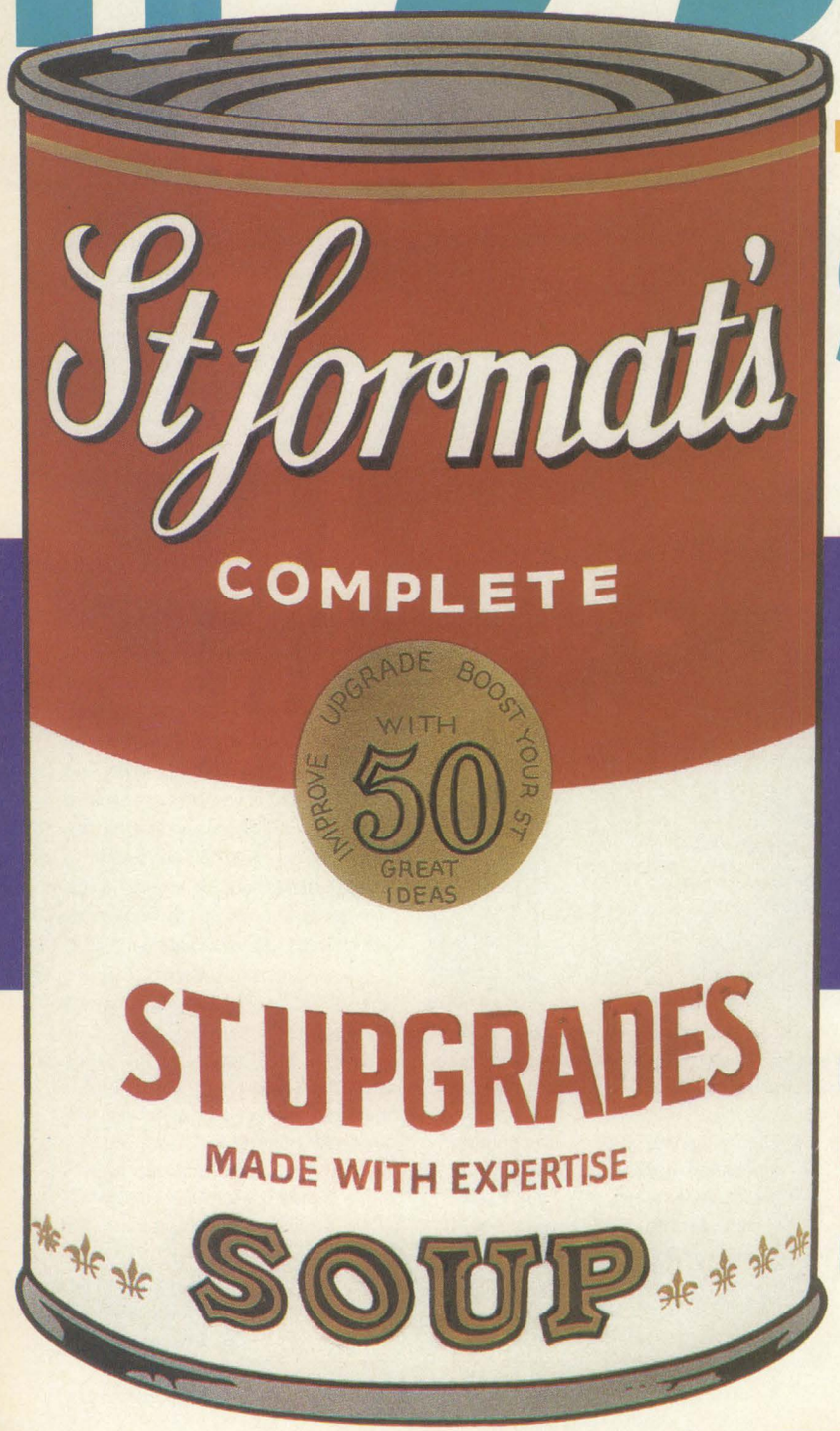
Type	Shareware
Registration fee:	Canadian $15 (£7)
Author	Michel Laliberte
Requirements	512K
Disk Number	Home Business Pack 1
Available from	Essex Computer Systems, 118 Middle Crockerford, Basildon, Essex SS16 4JA ☎ 0268 553963

AMIGA 75%

IT'S SOUP — FOR — STARTERS

IN NEXT MONTH'S

ST FORMAT



50 great ideas to soup up your ST!

On the menu in next month's feature on improving your ST: accelerators – hardware and software ● blitter chips ● external control devices ● PC emulators ● graphics cards ● hard drives ● mice and trackballs ● internal disk drive upgrade to 1.44MBytes ● keyboard enhancements ● memory upgrades ● modems ● monitors – colour, mono and multi-sync ● monitors – large screen ● TOS 1.4 upgrade ● TOS 2.06 upgrade ● tower cases ● internal single-sided disk upgrade ● external double-sided drives ● replacement Desktops ● replacement file-selectors ● replacement key tops ● key clicks ● ***and much more!***

PLUS! **The icing on the cake: a complete commercial software package worth £50 on our second Cover Disk, a guide to the latest in ST Public Domain software, a light-hearted look at what game heroes are up to now, a guide to making music with MIDI, 13 pages of tips and more!**

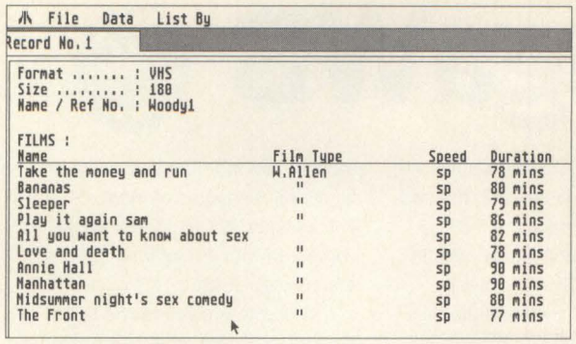
NEXT ISSUE ON SALE THURSDAY 11 JUNE

Beware of imitations

VidBase

Keeping track of your expanding video stock list is a doddle with VidBase, a purpose-written database to do just that...

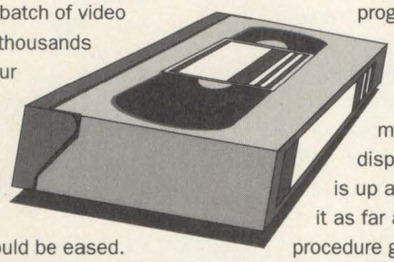
Drag *VidBase*'s folder into a suitable location on your hard drive. Then fire up the program and select Open from the File menu


File Data List By
Record No. 1
Format ..... : VHS
Size ..... : 180
Name / Ref No. : Woody1
FILMS :
Name Film Type Speed Duration
Take the money and run W.Allen sp 78 mins
Bananas " sp 80 mins
Sleeper " sp 79 mins
Play it again sam " sp 86 mins
All you want to know about sex sp 82 mins
Love and death " sp 78 mins
Annie Hall " sp 90 mins
Manhattan " sp 90 mins
Midsummer night's sex comedy " sp 80 mins
The Front " sp 77 mins

Dedicated databases are not something I usually enthuse over, but I've just got to tell you about *VidBase*. The program is devoted entirely to cataloguing collections of video tapes, and it does so with efficiency and panache.

Of course, almost everyone has a collection of videos at home nowadays, some of the bigger ones amounting to perhaps 20 or 30 tapes, and each containing a couple of movies or TV programmes. Finding the right tape can be very difficult, right?

But imagine having to collect and maintain a massive batch of video cassettes, perhaps thousands strong, as part of your business. All the videos would need to be filed under sensible categories so that the process of retrieving them could be eased. A difficult and thankless task, right? Even determining which videos were in the collection and which weren't would be a nightmare, and it's easy to see that the library would soon end up with lots of duplicates. And that's precisely where *VidBase* steps in.



A few years ago, the only businesses with such massive collections were video libraries. Because the owners of the libraries did the job full time, they were able to maintain the collection correctly. Today, everyone from the garage to the Chinese take-away offers videos for hire in an attempt to supplement their dwindling incomes. They have neither the expertise, time nor energy to look after the tapes. Consequently they soon get in a right old mess! But *VidBase* can be their saviour.

Bung the distribution floppy in a drive, and drag *VidBase*'s folder to your hard drive (although the program works fine from floppies it is much more useful to have a hard drive which can store so much more information). Next open the folder, locate the program's icon and double-click on it. The screen clears, a standard menu bar is displayed and *VidBase* is up and running. That's it as far as the installation procedure goes.

VidBase can manipulate files of 50 records (a record equates to one video), each subdivided into ten items. If that doesn't sound like much, get a hold of this. You can create and maintain as many files as your backing storage allows. On a floppy, you'll get hundreds of videos; on a hard drive, thousands! Enough for everyone.

Anyway, the 50 video files could be one way of categorising the collection. You could assign separate files to distinct categories of videos – children's, family, sport, science fiction, triple X, and so on.

The program is fronted by a standard GEM environment and backed with lashings of keyboard shortcuts. To create a new file, for example, pull down the File menu and select Open, or simply press f1.

Once there's a file open on screen, you can begin entering details. Heavy work, digitising the particulars of an entire video library, but think of the benefits once the task's completed.

Records are displayed in the form of cards, like those of real-world card indexes. Each is headed by fields for format (VHS, Beta, Video 8 and the like), tape length and a user-defined category (useful for denoting whether a video is in the shop or out on loan).

Below the header, there's space for up to ten items per record which can be used to describe the video. Title, a further category, speed and running time complete the information.

Like any database, full Search and Edit is available from the menu bar (...and hot keys), as well as a host of information including file space, disk space, time, date and more. You can rename a file at any time, list all of the files on the disk or delete any unwanted files. Printing is available in the form of a dump of the current record on screen, a selection, or an entire file. If there isn't a printer connected, or there's a fault (the device is out of paper or some such), *VidBase* will soon tell you about it. You can browse through videos, or search for a particular one by entering a key word or phrase. The program also enables you to toggle case-sensitivity on and off when searching.

In addition, searches can be confined to the format, length and type fields offered on the menu bar. You can pull up all the records which meet the search criteria, or simply view the first that you come across.

One very nice feature is the on-line help (although you won't need it within a day or two – *VidBase* is nothing if not intuitive). Described in the doc files as 'abbreviated', the feature offers help on *all* the program's functions and is nothing short of invaluable at first.

A piece of software which would have been too obscure to mention just a year or two ago, *VidBase* should now come into its own in a big way thanks to the increasing number of newsagents, garages and other businesses that hire out videos

Reliable, crash-resistant and thoughtfully-designed software which does its job, and does it well.

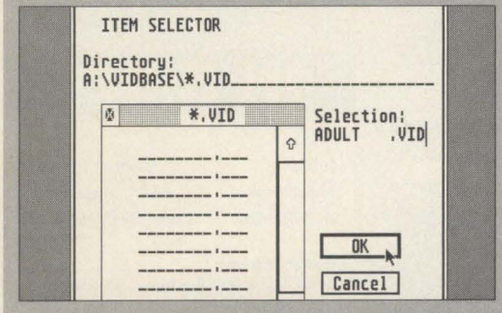
IN BRIEF

Type	PD
Author	Simon Wilkinson
Requirements	512K
Disk number	AU0132

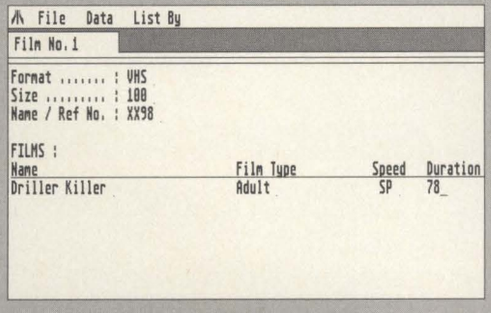
Available from:
Caledonia PDL, 250 Oldtown Road, Hilton, Inverness IV2 4PT
☎ 0463 225736

ST 80%

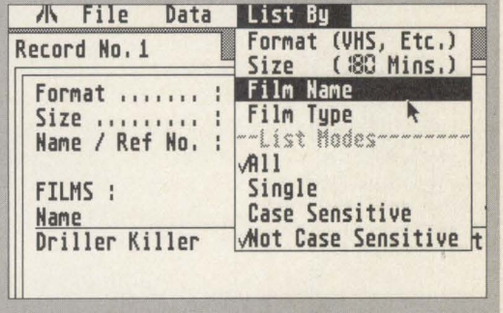
Computerising your video library with VidBase is as easy as one, two, three...



When the file selector appears, choose an existing .VID file or create a new one from scratch. You're now ready to start entering data from your video collection


File Data List By
Film No. 1
Format ..... : VHS
Size ..... : 100
Name / Ref No. : XX98
FILMS :
Name Film Type Speed Duration
Driller Killer Adult SP 78

All video records are held in the form of electronic cards – just like those in Woolworth's card files. This makes entering data very easy to non computer-literates



An enormous range of utilities and information is available from the standard menu bar. You can open more files or delete existing ones, print, and determine disk space

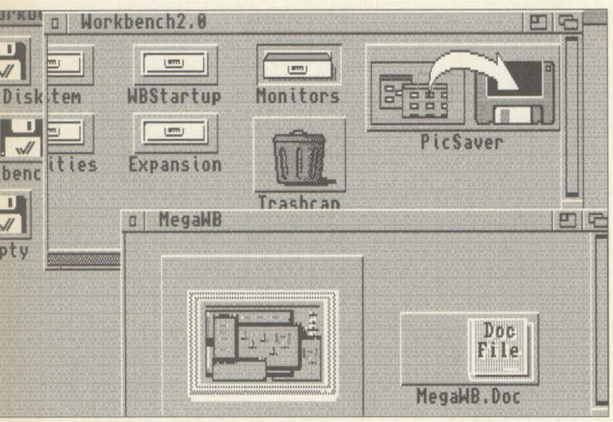
MegaWB

Regular readers of this section will remember *Monster*, the massive Desktop provider for the ST reviewed on these pages way back in issue three. Now there's a similar snippet designed to increase the size of the Workbench for all those Amiga desktop publishers, designers and the like looking for software to do the same for their machines.

Desktop publishing and such like is all very well, but a computer's monitor just isn't the same size or shape as the pages of most publications; it's short and squat compared with a magazine's lean and narrow layout.

Now, the Amiga may be to raw processing power what Mates are to birth control, but try shuffling a large DTPed document around on-screen for a minute or two, and you'll want to enter a new definition for the word 'frustration' in the *Oxford English Dictionary*. Hardware manufacturers around the globe have cashed in on the perennial problem by providing a myriad of enlarged screens, but without a wallet positively bulging with the inflated purchase price, your nose will remain permanently pressed against the dealer's window.

That's where *MegaWB* enters the fray. The program provides a virtual Workbench of seemingly unlimited size, defined by you! You can scroll left and right, up and down with the mouse just as though the Workbench was contained on an endless roll.

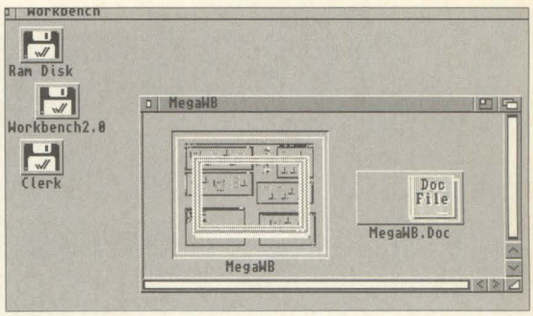


***MegaWB* does its stuff – get a load of that wrap-around! Just the thing for all those who can't afford an enlarged monitor**

What's that? *Virtual*? You've probably heard of virtual memory, right? Where the hard drive pretends to be RAM, providing the machine with an enormous memory? Well, a virtual screen follows the same principle. The monitor's screen acts as a *window* on to a much larger Workbench area. And unlike scrolling documents, the movement is mega-fast because the display is already drawn – it's just that you can't actually see all of it.

Rather than shoving the document around on-screen, you move the window over a much more expansive, although largely unseen display.

Default screen size is a massive 1024 by 512 pixels, or you can can enter custom figures to meet the needs of your particular software combination. You could, for example, stretch the screen into an elongated oblong, set up a fat American A4, or a tall and thin broadsheet page.



Unusually for a program of this type, *MegaWB* requires no complex installation procedure. Simply locate its icon and double-click!

Of course, the best option is still to get yourself a big-screen monitor. But if meagre Amiga spending power can't stretch to the necessary hardware, get a copy of Fridtjof Siebert's excellent virtual screen software.

IN BRIEF

Type	PD
Author	Fridtjof Siebert
Requirements	512K, single floppy
Disk Number	1431

Available from:
17-Bit Software, PO Box 97, Wakefield WF1 1XX ☎ 0924 366982

AMIGA 70%

The Clerk 3.0

Sanford L Finley is a man with a mission: to provide solid business accounting software to the impoverished Amiga community. That is, our man Finley looked around for a decent and affordable accounts package, came up with precisely zero, and decided instead to write his own. The result is *The Clerk 3.0*, an entirely free modular accounting package.

Once you've got the program running (which isn't easy as there's a rather complicated password system you have to fathom out), the first step is to create a chart of accounts. These are what you use to define everyday financial in, out and throughput. So pull down the General Ledger menu and select Create Chart of Accounts.

Now you can start to enter account names. Up to 22 accounts are available, each fully user-definable with a 26-character title; I'm not sure there are many businesses that would flourish with just 22 accounts, though. You're also prompted for a company name and address which will appear on printed statements.

Sanford has kindly provided several of his own accounts charts for you to use as templates if the set-up procedure is just too much. These act as a useful entry point into the program and enable you to develop familiarity before attempting to customise what's on offer. What a thoughtful man!

Clerk is fronted by a standard menu bar offering accounts payable, accounts receivable and general ledger. All the options associated with each account are clearly described and available from the relevant menu, so there's no need to thrash around trying to work out how to perform some monetary action or other.

In order to conserve memory, the program makes extensive use of dynamic arrays. That is, memory usage grows relative to increasing file size. Clever, right? Except that apparently, *Clerk* can crash if you hack a large number of records into an account during the course of one session! Sanford assures his subscribers that they won't lose any records, but are you willing to take the chance with valuable business data?

On the upside, there's *Clerk*'s simplicity and friendliness, good documentation and, apart from the array thing, rigid refusal to crash under normal conditions. One great feature is that, unlike commercial offerings, *Clerk* doesn't delete old records; everything you've entered remains on disk until you trash it. All in all, a friendly and usable program but one which has just too much riding on good luck, perhaps, to be taken seriously.

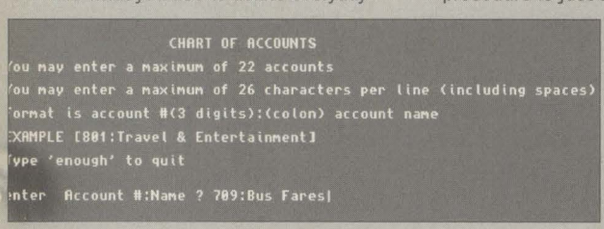
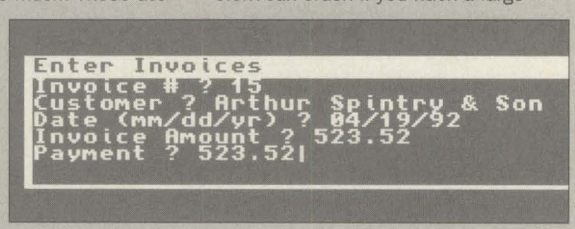


CHART OF ACCOUNTS
You may enter a maximum of 22 accounts
You may enter a maximum of 26 characters per line (including spaces)
Format is account #(3 digits):(colon) account name
EXAMPLE [801:Travel & Entertainment]
Type 'enough' to quit
Enter Account #:Name ? 709:Bus Fares

Using *Clerk* begins with the inevitable set-up procedure. The first step is to define the accounts you want to use and name them



When the installation is over, you can begin to enter transactions. You're guided at all times through the process by comprehensive prompts

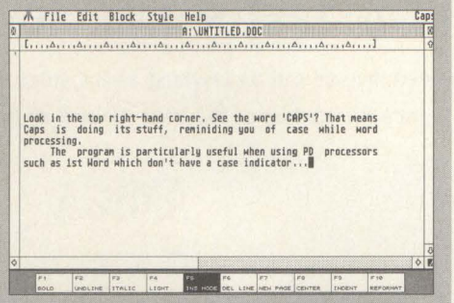
IN BRIEF

Type	PD
Author	Sanford L. Finley
Requirements	512K, single floppy
Disk Number	Home Business Pack (disk 4)

Available from:
Essex Computer Systems, 118 Middle Crockerford, Basildon, Essex SS16 4JA ☎ 0268 553963

AMIGA 55%

Caps


File Edit Block Style Help
A:\UNTITLED.DOC
Look in the top right-hand corner. See the word 'CAPS'? That means Caps is doing its stuff, reminiding you of case while Word processing.
The program is particularly useful when using PD processors such as 1st Word which don't have a case indicator...

If you're one of those typists who has to look at the keys while hacking text into your word processor, *Caps* is just the thing – a constant reminder of whether you're in upper or lower case

Caps is a useful little snippet which indicates whether you are typing in upper or lower case letter when you're using your favourite PD word processor. A stupid idea, I agree, but if your typing consists of frantic 'hunt and peck' sessions coupled with a stony and immovable grimace at the keyboard, it's very easy to hit the Caps Lock key by mistake and look up to find paragraphs of unwanted upper case text.

Caps negates the problem by putting a permanent CAPS display in the upper right corner of the screen. A quick glance, and you'll know which case is current. The program works as a Desktop accessory. That is, to install the program all you need to do is bung it on a boot disk, and fire up the ST. Pull down the Desktop menu, and there's *Caps*, waiting to do its stuff. Now if you select the program, the greyed-out word 'CAPS' appears on the menu bar.

Launch a GEM-based application, engage caps lock, and 'Caps' changes from grey to black. It works with all GEM programs (almost every ST business package ever written), and doesn't interfere with normal operations.

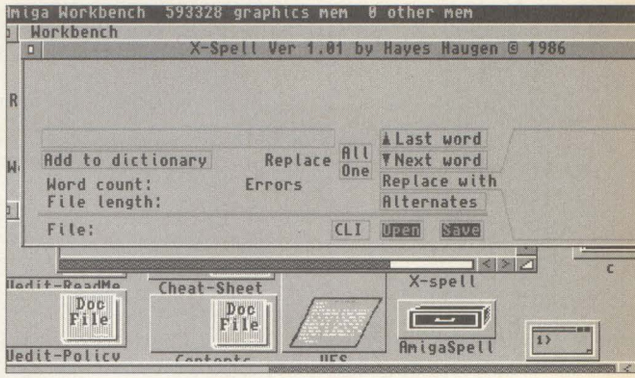
IN BRIEF

Type	PD
Author	Antonio Flaccomio
Requirements	512K
Disk number	U69

Available from:
MT Software, Greensward House, The Broadway, Totland, Isle of Wight PO39 0BX ☎ 0983 756056

ST 55%

X-Spell



Don't like using the Amiga's Shell? No problem. *X-Spell* runs from the command line and the Workbench. Just locate and double-click its icon to display this dialog box

Anyone who regularly uses a word processor or desktop publishing package needs a spell checker, and if you've got an Amiga *X-Spell* is well worth checking out.

The program resides in the C drawer on your boot disk together with its dictionary. To use it, open up the Shell and type:

```
XSPELL <path>Filename
```

where Filename is the text file you want to check.

Don't like the Shell? Don't sweat! Open up your C drawer by double-clicking it with the mouse, locate *X-Spell*'s icon and double-click on it. The spell checker then displays a dialog box from which you can open a text file, check and correct it.

Not one of the easiest spell checkers to use, nor one of the most comprehensive in terms of features and its dictionary. But it works well enough, and with the minimum of fuss and bother. And it is PD, after all, so you're only paying for the distribution costs. Well worth checking out if you don't want to splash out.

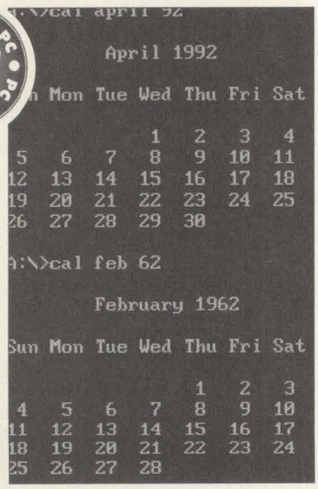
IN BRIEF

Type	PD
Author	Guido Fella
Requirements	512K
Disk number	1479

Available from:
17-Bit Software, PO Box 97, Wakefield WF1 1XX ☎ 0924 366982

AMIGA 60%

Cal



Simple, yet effective, *Cal* generates a calendar for any month and year you care to give it, and you can redirect the output to a file for printing

This is quite possibly the simplest piece of PC public domain software ever. *Cal* generates an accurate calendar for any month of any year.

To run the program, ensure it's in the current directory, then type, say:

```
CAL APRIL 92
```

or whatever month and year you want a calendar for, and press Return. Seconds later, a neat little calendar pops up on your monitor screen.

There isn't, unfortunately, a command to send the calendars to your printer, but there is a way around the problem. Two ways, in fact!

The first is simply to do a screen dump using your PrintScreen key after *Cal* has generated a calendar. The second is more fun and rather more intricate. You can redirect the program's output to a file, then load the file into a word processor, DTP package or whatever for printing. Here's how to do it. Type:

```
CAL APRIL 92 >>CALFILE.TXT
```

substituting the desired month and year and your own dump file name.

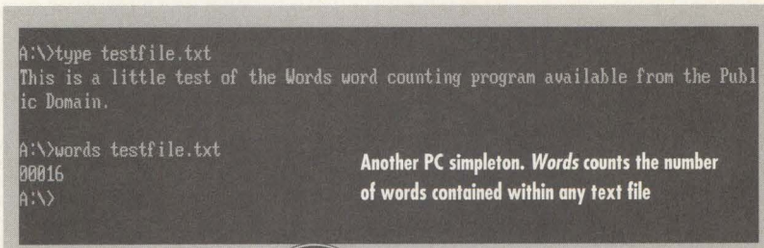
Earthshattering it may not be, but it's so handy to have around to call up at a moment's notice. OK, so in the office you can turn around and look at the wall planner, but *Cal* is ideal for the portable PC owner whose diary is buried too deep in their inside pocket.

IN BRIEF

Type	PD
Author	Unknown
Requirements	256K
Disk number	1019

Available from:
PDSL, Winscombe House, Beacon Road, Crowborough, East Sussex TN6 1UL ☎ 0892 663298

PC 60%



Another PC simpleton. *Words* counts the number of words contained within any text file

Words

Yep, here's another incredibly simple yet very useful wee PC snippet from the public domain. *Words* counts the number of words in a text file and displays the amount on screen. Stunning, huh?

As any writer knows, word counts are incredibly important, especially if you're a professional being paid by the thousand words! Consequently, it's very important to know exactly how many words you've typed.

You could count them all yourself, but then you could also read the entire end credits of *Superman the Movie* – both offer about the same amount of excitement. That's why word counting utilities become absolutely essential to anyone who uses a word processor or text editor regularly.

Unfortunately, not all word processors provide a word counting feature as standard. But now all's well, because if yours doesn't you can use *Words* instead.

Running the program is a breeze. Switch to its directory, type:

```
WORDS <path>TEXTFILE.TXT
```

and press Return, substituting suitable path and text file names of course. *Words* does its stuff in seconds and displays an accurate count on-screen. Reliable, if not remarkable.

IN BRIEF

Type	PD
Author	Unknown
Requirements	256K
Disk number	1019

Available from:
PDSL, Winscombe House, Beacon Road, Crowborough, East Sussex TN6 1UL ☎ 0892 663298

PC 65%

The best of the rest • The best of the rest • The best of the rest

OK, let's face facts. If you've missed any of our previous seven issues you've missed out on learning about some pretty funky business and applications programs. But all is not lost, 'cos we're nice here. So here's a round-up of the best PD and shareware has to offer...

PC

❶ Easy Edit II — Issue 2 — 95%

AsEditCo, Warren Cottage, Warren Lane, Elmswell, Suffolk IP30 9DT ☎ 0359 41601

A superb and friendly word processor that is so packed with excellent features that you will hardly be able to believe the £35 shareware fee.

❷ Homebase — Issue 1 — 95%

Brown Bag Software, 2155 South Bascom Avenue, Suite 114, Campbell CA 95008 ☎ 0101-408-559-4545

What this desktop organiser doesn't offer you definitely don't need – word processor, database facilities, compact comms functions to name a few.

❸ PowerMenu — Issue 1 — 90%

Brown Bag Software, 2155 South Bascom Avenue, Suite 114, Campbell CA 95008 ☎ 0101-408-559-4545

A friendly menu-driven replacement front-end to do away with the dreaded DOS.

❹ Marketeer 2.1 — Issue 2 — 90%

Fantasia Shareware, PO Box 1231, Clutton, Bristol ☎ 0761 453716

For the field sales rep, *Marketeer* is a contacts manager and sales prospecting system and is the ultimate tool in organising lists of clients.

❺ Word Fugue — Issue 2 — 90%

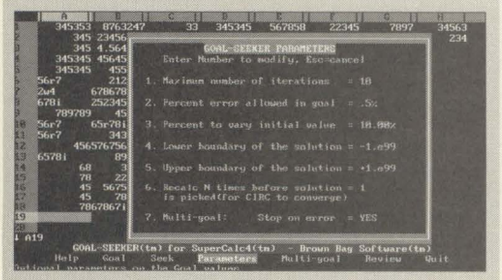
Advantage, 56 Bath Road, Cheltenham, Glos GL53 7HJ ☎ 0242 224340

An excellent and adaptable word processor that even generates tables and lists with the minimum of fuss and includes an 100,000-word dictionary. Shareware.

❻ Goal Seeker — Issue 3 — 90%

Brown Bag Software, 2155 South Bascom Avenue, Suite 114, Campbell CA 95008 ☎ 0101-408-559-4545

A handy little add-on utility for speadsheets that can work out the relationship between data so that you can work out 'goals'.


GOAL-SEEKER PARAMETERS
Enter Number to modify, Esc=cancel
1. Maximum number of iterations = 10
2. Percent error allowed in goal = .5%
3. Percent to vary initial value = 10.00%
4. Lower boundary of the solution = -1.e99
5. Upper boundary of the solution = +1.e99
6. Recalc N times before solution = 1
is picked(for CIRC to converge)
7. Multi-goal: Stop on error = YES
GOAL-SEEKER(tm) for SuperCalc4(tm) - Brown Bag Software(tm)
Help Goal Seek Parameters Multi-goal Review Quit

Work out whether you're stocked up enough with *Goal Seeker*

❼ Task-Pro — Issue 5 — 87%

Ensign Systems, Freepost, London SE26 5BR ☎ 081-778 2871

Delegates tasks to the right people to make sure the job gets done using this handy organisation/scheduler program. It looks pretty good, too.

❽ Do-Spell — Issue 7 — 85%

SMS Shareware, 19 Corshalton Road, Camberley, Surrey ☎ 0276 681864

A Dutch spell checker might sound as useful as chocolate teapot, but it comes with an English dictionary, tons of useful features and a high recommendation from us.

❾ Boxer — Issue 7 — 85%

Wilkes & Son, Bunbury, Tarporley, Cheshire CW6 9PE ☎ 0829 260775

One of the new generation of text editors with its own customised windowing environment and an undo function that can take you back through 512 operations.

❿ FrontDesk — Issue 6 — 85%

Ensign Systems, Freepost, London SE26 5BR ☎ 081-778 2871

To help out overworked receptionists and secretaries *FrontDesk* has the ability to log telephones calls, keep track of appointments, store telephone numbers, etc.

ST

❶ Word400 — Issue 6 — 95%

Goodman Enterprises, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW ☎ 0782 335650

A stunningly good word processor that can be installed as a desktop accessory so that you can call it up, even when you are using another application.

❷ Double Sentry Elite — Issue 6 — 93%

Caledonia PDL, 250 Oldtown Road, Hilton, Inverness ☎ 0463 225736

Upgrade of *Double Sentry*, a massive collection of everything you need to track and manipulate small – and large – business finances. Simple to use and packed with features.

❸ FastBase — Issue 3 — 93%

Caledonia PDL, 250 Oldtown Road, Hilton, Inverness ☎ 0463 225736

Possibly the best shareware database in existence, *FastBase* enables you to open up to 22 database files at once and is stuffed with features.

❹ Arabesque — Issue 4 — 92%

South West Software Library, PO Box 562, Wimborne, Dorset BH21 2YD

The drawing package that no ST-owning draftsman should be without.

❺ Sheet 2.0 — Issue 1 — 90%

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A spreadsheet that can cope with the most complex of today's financial double dealings.

❻ ST Writer — Issue 1 — 90%

Goodman Enterprises, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW ☎ 0782 335650

Quite simply one of the best shareware word processor around for the ST – it beats the pants off most commercial products too, so what are you waiting for? Get it.

❼ Fone Cost 2.0 — Issue 2 — 90%

Ainley Publishing and Communications, 16 Copyground Court, Copyground Lane, High Wycombe HP12 3HG

If you want to keep your phone bills to a minimum you need *FoneCost* – it counts BT phone units ticking by as you natter away.

❽ Opus — Issue 3 — 90%

Softville, Unit 5, Stratfield Park, Elletra Avenue, Waterlooville, Hants

A true third-generation spreadsheet with extended mathematical functions, a fully functional text editor and lots more besides.

❾ The Guru — Issue 5 — 85%

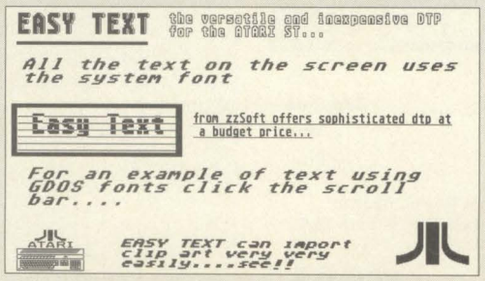
Wooleysoft, Humblesknowe Cottage, Ramoyle, Dunblane, Perthshire, Scotland FK15 0BA

A interactive card file system that can be called up from within GEM applications.

❿ Easy Text — Issue 2 — 85%

Goodman Enterprises, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW ☎ 0782 335650

This is a budget desktop publishing package that is an attempt to provide true page layout on the ST – and it works fairly well.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Easy Text
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EASY TEXT can import clip art very very easily....see!!

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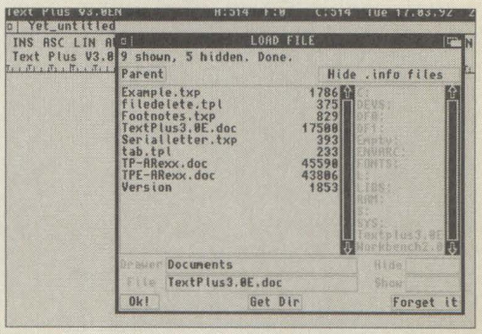
AMIGA

❶ TextPlus 3.0 — Issue 7 — 92%

Déjà Vu, 25 Park Road, Wigan, Lancs, WN6 7AA ☎ 0942 495261

TextPlus 3.0 is a word processor positively dripping with the kinds of features you would normally have to pay huge amounts of money for. An essential purchase.



Word processing that's every bit as good as full-priced products

❷ AMOS Database 3.01 — Issue 6 — 92%

Déjà Vu, 25 Park Road, Wigan, Lancs, WN6 7AA ☎ 0942 495261

Masses of text and picture manipulation, pop-up menus for everything, simple file access and a very impressive front-end make AMOS database 3.01 the best database package you're going to find in the public domain.

❸ Uedit — Issue 3 — 90%

Cranham's Leisure Software, PO box 7, Bletchley, Milton Keynes, MK2 3YL ☎ 0908 640763

A fully-customisable text editor which means that you can make *Uedit* fit your exact requirements. What's more, it's a doddle to use, too.

❹ Text Engine — Issue 3 — 86%

17 Bit Software, PO Box 97, Wakefield WF1 1XX ☎ 0924 366982

Text Engine is simple to use and offers a comprehensive range of features.

❺ Unit — Issue 7 — 85%

Essex Computer Systems, 118 Middle Crockerford, Basildon, Essex SS16 4JA ☎ 0268 553963

The ultimate measurements conversion program. Everything from litres to pressure.

❻ TapeCover — Issue 4 — 85%

17-Bit Software, PO Box 97, Wakefield WF1 1XX ☎ 0924 366982

If you make a lot of your own recordings on cassette tapes then you need an easy-to-use tape cover designing program. And that's exactly what this is.

❼ Transcript 1.0 — Issue 2 — 85%

Software Expressions ☎ 0272 637634

An exceptional word processor, packed with features and lightening fast to use.

❽ Road Route — Issue 4 — 80%

Vally PD, PO Box 15, Peterlee, County Durham SR8 1NZ ☎ 091-587 1195

How to get from A to B using major roads. Written for the US so you'll have to put in a little time and effort feeding in your local data to make it work for you.

❾ Text Plus — Issue 2 — 80%

Amiganuts United, 169 Dale Valley Road, Hollybrook, Southampton SO1 6QX

Another very good word processor which is absolutely bursting with features.

❿ ElectroCAD — Issue 3 — 80%

Crazy Joe's PD,145 Effingham Street, Rotherham, South Yorkshire S65 1BL ☎ 0709 829286

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PPS1 * People, Picture and Sound Database
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MAGCAT * Magazine/Catalogue Database
LM42 * Label Master, Mailing List Database
MVLIB * Database on over 3000 videos
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VT130 * Video tape library database
PED205 * Track dog pedigrees & awards
SUSIE * Complete software library management

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MULTIWORD * Popup electronic Thesaurus
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FORMFILL * Formgen companion
BUSFORM * Business forms for Formgen
SFORM * Yet another form generator
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SWORDP * Emulates Word Perfect {4}
PCBROW * Search, cut, paste & find text {2}
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KAMIKASI Shoot-em up
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FORD SIMULATOR
FROGGER
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MARIO Mario-bros style
NINJA Fight the Ninja!
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PCPOOL Pool & 8 Ball
SEAWOLF Submarine Cm
STARGOOSE
WIZARD Pinball game
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DOMINOES
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MAHJONGG Tile game
BACKGAMMON
NOUGHTS & CROSSES
BLACKJACK CGA
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WIN-INI * Win.ini file editor
ICONMAG * Supposedly the best icon manager
LENORD * Drawing program with many features
ORGANISE * Sort of Filo Fax for windows
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WSCAN * MacFee's virus scan for windows
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WINDOWS GAMES

AFORCE * Space shoot-em up
ATMOID * Asteroid games
BG6 * Colour backgammon
BLCE12 * Block breaker game
CHOMP * Pacman style game
CHOPTER * Helicopter game
JEWEL * Jewel thief, steal jewels, avoid guards
LUNAR * Lunar lander simulation
KLOTZ * Tetris style game
LIFE * The game of life
MAHJONNG * Tile game
MINES * Avoid the minefield, pretty good
MRMIND * Mastermind game
PEGGED * Fun peg game
PUZZLE * Slide puzzle, uses .BMP pictures
SPACEW * Spacewalls shoot-em-up game
WINCHK * Checkers game
WINCHSS * Windows chess
WINHNG * Hangman game
WINSLOT * Slot machine game
WINJACK * Fast paced Blackjack card game
WWAR * Wormwars centipede style game
ZONEONE * Risk style game
YACHT * Yatze type dice game

NOTICE

THIS SHAREWARE IS FOR EVALUATION PURPOSES ONLY. PAYMENT IS DUE TO THE AUTHOR IF FOUND USEFUL.
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SHARESENSE

Problem Solved!

Need some instructions for your programs? Want to organise your own tenpin bowling league? Or do you want to find out what's involved in running a PD library? Then these are the pages where we can help you out, as the PDQ computer prints out the data for Tim Howell to analyse. So if you're confused, befuddled, or otherwise in need of aid (and it's PD related!) write to: Help Me PDQ, Public Domain, 30 Monmouth Street, Bath, Avon BA1 2BW...

Striking out

Q I am an Atari 520STFM user and have owned one for a little while now. I am also very keen on tenpin bowling, and my problem has to do with my involvement in this sport.

I run a few bowling leagues and have over 150 bowlers to look after. The problem is having to calculate and type in all the scores, pin falls and handicaps, etc every week and then print it out in a presentable league format for the following week.

There must be a program on the market that will do most of the work for me and ease my aching fingers. I have tried several league programs but the problem with most of them is that they have been designed for football so the points system is no use for me, not to mention the pin fall and handicap side of the program.

Can you help?

Colin Gordon, Mastrick, Aberdeen

A *Even though we've had a lot of letters this month, we had to spare some space for your one. There are a couple of options you could try, and hopefully you'll strike it lucky with one of them. We'll just have to dress PDQ up in a pin-striped suit first... (that's enough bowling gags – Ed)*

Right, here we go. The first option is to try and use a program that is designed to create and manage leagues. Just like you, we're not aware of any that have been specifically designed for managing tenpin bowling leagues which are more complex than those for many other sports, because of the amount of variables. But you might like to try (if you haven't already) League Table 1.2 *which is on disk 840 from the South West Software Library. This appears to be a general program for maintaining sports league tables, although no mention is made of tenpin bowling. Maybe, just maybe, this might be able to help. South West Software Library is at* ***PO Box 562, Wimborne, Dorset BH21 2YD****. If any readers know of a custom program that can handle tenpin bowling statistics, then you know where to write...*

Another option is to use a conventional database program and set it up so it can handle the many different parameters of your sport, although this will require a bit of work. In the end though, once you have learned how to use the database it should be more flexible than other, specific league management programs. As for where you can get such a program, try Fastbase, *a shareware package which we reviewed in issue three of* Public Domain. *It can be obtained from* ***Caledonia PDL, 250 Oldtown Road, Hilton, Inverness, Scotland IV2 4PT ☎ 0463 225736.***

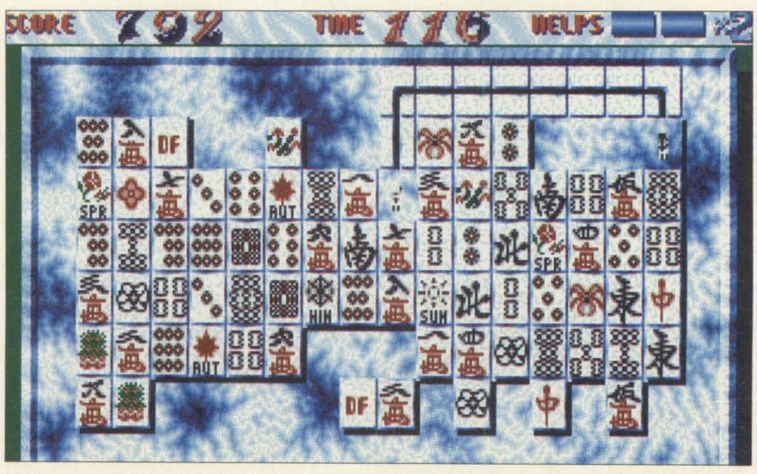
Proper documentation

Q I have bought a second hand Atari 520STFM and Panasonic KX-P1081 printer. I am finding it very hard to get help to set up and run programs, etc. When I go to my local computer shop they are not at all helpful because my kit isn't new. I also find that the PD disks I get don't come with any instructions or paperwork, including the games. I wouldn't mind paying more for the programs if they had some paperwork with them.

Please help by telling me of someone who could put some instructions on the PD disks.

I am also trying to get the game *Mahjong* for the ST in low or medium resolution. Could you please tell me where I can get this or an equivalent?

L Taylor, Hatfield, Herts



It's not quite Mahjong, but *Match It*'s the next best thing you're likely to find for the ST

A *Unfortunately some computer shops don't help computer users if they haven't bought a computer from them or the computer's warranty has run out. There are some exceptions, though, and you might strike it lucky with your local computer shop. In these cases, if you are having problems, it might be a good idea to contact a local user group which will have members able to help you, or write back to the manufacturer of your printer.*

Lack of program documentation is a fact of life with PD software, but it's a situation that seems to be improving all the time. There are a few reasons why some documentation may not be up to scratch. Often the programmers develop software for their own use – particularly utilities – or for like-minded people who they think will be able to figure the program out without any help. Other reasons include sheer laziness, or the feeling that because the program's going to be free, then they don't need to bother too much with its presentation. Thankfully this isn't the case with many programs these days; as they improve in quality the authors pay more attention to important things like instructions.

Anyway, back to your question. There are a couple of avenues you could follow to get printed documentation. One option is to join a user group or club which may be able to offer printed documentation as part of their service, or at least put you in touch with people who could print them out for you. The same people could well be able to help you out with

any other problems you may have with your printer or PD software; actually talking to other users can make things much easier to understand.

For documentation another option is ProBUS, a library which supplies printed documentation with all its ST programs, as long as you subscribe to its services first. The cost of subscription is £12. ***ProBUS, can be contacted at Birchy Hill, Sway, Lymington, Hampshire SO41 6BJ ☎ 0590 683390.***

As for getting documentation for programs that don't come with any, Rust PD claims that all the disks it supplies come with documents; either the original file or one it has prepared itself. These files are on disk and not paper, however. To get in touch with ***Rust PD, contact the company at 361 Ordnance Road, Enfield Lock, Middlesex EN3 6HF ☎ 0992 717828***

There is a brilliant Mahjong-type game in the form of Match It, *a Budgie licenceware game for the ST which we gave a rating of 89 per cent in issue five. It's not an authentic clone, but it's based on the same principles and is exceptionally well done. The game costs £2.95 and is available from* ***New Age PDL, 30 Anderson Estate, Lower Road, Hockley, Essex SS5 5NG.***

Setting up a library

Q I'm thinking of starting my own PD library and would appreciate a few tips. How do I go about getting the software for it? Can I just use any PD or shareware programs or are there rules governing what I can sell?

Also, what's the position when it comes to the digitised graphics and sound demos which were mentioned in the last issue of *Public Domain*? Will I get into trouble if I sell them?

Do you have any other hints and tips? Your help would be appreciated.

Scott Wilson, Kensington, London

A *There are a number of different ways you can gather software to use in your library. PD disks, by their very nature, can be freely copied by anyone, so any you come across can be copied and added to your library. When it comes to shareware – and some PD programs as well, for that matter – some authors place restrictions on the way their programs can be distributed and how much you can charge for them, so it would pay to get in touch with the programmer before you stock some disks.*

You have to be wary of several types of software. Licenceware programs can't be sold by any one; you have to contact the licenceware publisher to get permission before you can handle its products. Some of these programs are exclusively available from designated libraries, and should be left alone.

While it's easy to get hold of the software to go in your library, there are other important considerations. Your customers are very important, and you should try to ensure that you send out their disks within a couple of days of receiving their order, depending on how they are paying; if they are paying by cheque it might be best to make sure it clears first. Also, a catalogue of your disks is essential and the more clearly laid out this is the better; people don't like hunting through dull lists of text to find a program.

The key to being successful really comes down to how seriously you want to get into things. You have a responsibility to your customers to provide a good service as well as run a business, and your time and resources have to be balanced accordingly. For the full details on what's involved in running a library, have a look at Public Domain *issue two.*

As far as the copyright issue is concerned, matters are still unclear. For a full insight into the current situation, have a look at our feature on page 49 of this issue. PD

Open to the public ● Open to the public ● Open to the public

Though it won't admit it, there are things about the public domain that PDQ doesn't know. That's where you can help out, and win yourself a tenner, by answering these questions that have stumped our computer...

● Typing troubles

I have arthritis in my fingers and use my PC mainly for letter-writing. What I'm trying to find is a typing aid that sends a space after each punctuation mark, with a capital letter following full-stops.

I used to have one for my Amstrad CPC6128 that I typed in from a magazine, but I now have an Amstrad 1640ECD, 20Mb hard disk and both 3.5- and 5.25-inch drives.

There is a word processor called *Mindreader* (which was reviewed in *Public Domain* issue two) that practically does this, but I don't like the program much, and since I've been using *Protext* for about ten years I don't feel like changing over to another, so what I really need is an add-on utility.

These automatic spaces and capitals make a great difference to the necessary finger manipulation with a word processor, especially when your fingers don't work as they used to.

Thanks for giving me a bit of help for the moment. I'll have to see what the fountain of knowledge can manage.

D Mitchell, Clacton-on-Sea, Essex

(There are a lot of add-on programs for other commercial applications available in the public domain – are there any for* Protext*? Or are there any other PD or shareware word processors, or add-ons for them, that can do what D Mitchell is after? You know where to write...)

● Picture language

Please could you tell me where I could get a copy of an icon-driven programming language? That's to say, one that doesn't use any typed-in program commands.

Roy Hall, Queens Park, Glasgow

(We're not sure of any icon-driven programming languages, let alone one that is PD or shareware. Do any readers know of any for either the Amiga, PC or ST? If so, write in and you could earn yourself a tenner...)

Public knowledge ● Public knowledge ● Public knowledge

Here are some readers' answers to questions that have stumped PDQ in previous issue. Each sender wins a tenner, so if you think you can help out as well, just write to the usual Problem Solved address...

● Taking notes

In response to the letter from Mark Bickerdike in the April issue of *Public Domain* which asked for any information on a music printing program for the Amiga, I found that it was easy enough to make my own using *Deluxe Paint II*, drawing the staves on a page and creating notes and other symbols as brushes, pasting them to the screen and printing it out. It may take time to do initially, but it works well enough.

If Mark would like a disk of musical staves and brushes, perhaps he could contact me through *Public Domain*, sending me a blank disk for a copy of my music brushes disk.

P Male, Halifax

(Thanks for the reply. Have you considered putting your disk of notes into the public domain? I'm sure there are loads of people who would find them useful. Anyway, if Mark Bickerdike or anyone else would like to get the disk, write to us including a disk and SAE we'll pass it on to P Male.)

● Cross formatting

In reply to DJ Watson's letter in issue four of *Public Domain* there are several PC format PD programs available for the ST. The best of them is *DC Format 3.0* which is available on disk ST71 from Seven Disk PDL ☎ 0438 840456.

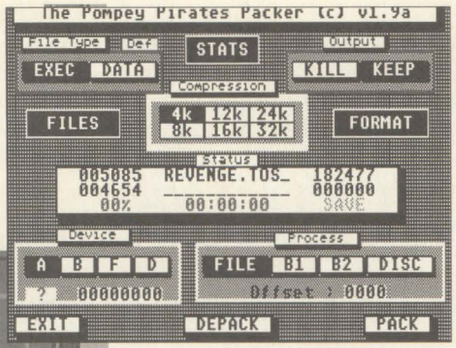
***DC Format* also has a wealth of other formatting features including formatting disks for the *Spectre 128* Macintosh emulator.**

Stephen Preston, Newton Stewart, Wigtownshire

● Simple solution

In your May issue Sanjay Chavda wrote about having problems with his printer. The problem might not be as serious as you suggested. The printer driver he is using is indeed the correct one, and the error message generated when he tries to print could be because the printer is simply not turned on-line. This is the error that appears on my Star LC-10 printer using the same printer when I forgot to put it on-line. I hope this helps.

Darren Kemp, Beckett Park, Leeds



The screen might look a slightly cluttered but the *Pompey Packer* is actually one of the easiest compressors to use

Compact disks

Shrinking programs to fit as many on a disk as possible doesn't have to mean fiddling about with complicated archivers. Compression does the same job, and, as space-efficient Tim Howell explains, it's as simple as clicking your mouse button...

Quantity and quality. They're the two keywords of public domain software. While there are thousands of PD and shareware programs out there, they aren't that good value if they come on disks by themselves; no, if they're small enough, they should be packaged with other programs. This is where archiving and compression programs fit into the scheme of things.

Archiving we covered in issue five. This technique combines a number of programs into a large, single file, at the same time compressing all the data. Archiving is most often used in communications, where it is much easier to transfer one file across the phoneline than a whole lot of them.

Archiving has one major drawback, however. When you get an archived file you can't actually use it straight away. To get it in a format that you can use, you have to dearchive it to turn it back into all the separate files it was originally. This isn't all that difficult to do, but it can be a hassle.

Enter compression. This is another way of making files smaller in size, but it keeps them in their original form – that is, the files of a program aren't 'merged' into a single archive but remain separate, only they're smaller in size than they were before. So you can run a compressed program simply by activating it in the normal way, such as, perhaps, clicking on an icon. The program then decompresses into the computer's memory; however, the actual program file on disk remains in its compressed form.

The tell-tale signs

While you can tell archived files apart from normal files by their filename (they usually have a suffix such as LZH, ZIP or ARC), from a directory listing compressed files just look like any normal file.

The visual difference comes into play once compressed programs begin loading – they often display a flashing screen with striped lines and a flashing mouse pointer, or the screen may shake and look distorted. This isn't always the case: for instance, programs compressed using the *Titanics Cruncher* on the Amiga actually decompress while they are loading and nothing is visibly apparent on-screen.

When compressed files are loaded and decrunch themselves, a couple of things are happening. For a start, while the computer recognises the file – lets say it's a program file – its structure has changed from what it was originally. Now when the compressed file is loaded, the header, or beginning, of the file contains the information that enables the computer to both recognise the file as a program and then automatically decrunch it when it has been loaded into memory.

What can be compressed?

Almost all files can be compressed. Files can generally be divided into two main areas: program and data files. Program, or

The ST's *Jam Packer* enables you to both compress and decompress a variety of file formats easily

Compress or archive?

The argument for compression:

- Convenience – Compressed files can be used straight away without the need for a specialised program to 'unlock' them, as with dearchivers
- Efficiency settings – You can set up the programs to compress files to different efficiencies

The argument against

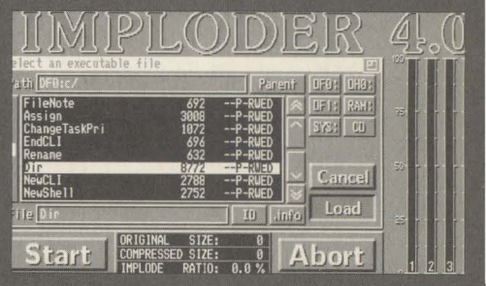
- Multiple files – Compression keeps files in their original, ie multiple, state and this is inconvenient when you transfer data using a modem
- Speed – Compressing files at higher levels of efficiency can take a long time; much longer than with standard archiving utilities. However, the size of the files, when taken collectively, can be much smaller
- Hard drive – If you have a hard drive and can spare the space, uncompressed programs will load and run faster than compressed programs which take time to decompress

How to 'Implode' your files

STEP-BY-STEP GUIDE

The Amiga's *Imploder* is one of the most attractive compression programs available, and one of the most powerful. It's not as complex to use as some similar programs, but it offers functions that are common to them all. One quirk is that if you only compress one file, because it has to be saved to a library the combined size of the compressed file and library may be bigger than the uncompressed file was originally. This may make the process sound rather pointless, but it still has advantages if you want to compress a number of files as disk space will be saved in the long run.

1 As soon as *Imploder* loads, its attractive presentation is immediately apparent: music plays in the background while the screen's colour scheme and layout look good. In fact, the whole thing's a lot like a demo, but much more useful. To begin compressing, click on the Start button



2 The next step is to load the program you want to compress. This is done using the standard Amiga file requesters. We'll try the DIR command, as found on the standard Workbench disk. Select the file from the others, and click on Load. As the file loads its structure is checked by *Imploder*

Available at your local PD library now!

- **POWERPACKER 2.3B – Shareware • Amiga • Disk 1880 • Crazy Joe's, 145 Effingham Street, Rotherham S65 1BL ☎ 0709 829286**
- **IMPLODER 4.0 – PD • Amiga • Disk U640 • NBS, 1 Chain Lane, Newport, Isle of Wight PO30 5QA ☎ 0983 529594**
- **TITANICS CRUNCHER – PD • Amiga • Disk 1005 • 17 Bit Software, 1st Floor Offices, 2/8 Market Street, Wakefield WF1 1DH ☎ 0924 366982**

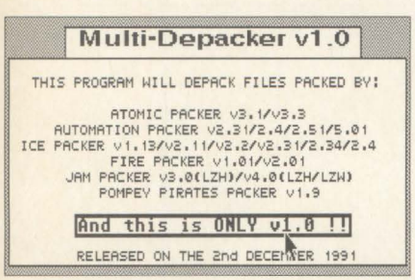
• All the ST compression programs mentioned in this feature, and more besides, are contained on Disk UTL424 from Floppyshop, 45 Provst Graham Avenue, Hazelhead, Aberdeen, Scotland AB1 8HB ☎ 0224 312756

• Many compression programs, particularly popular ones like *Powerpacker* and *Imploder*, are found on a variety utility compilations which are available from most PD libraries. Just check through a few catalogues and you're sure to find one pretty soon

executable, files are the files that you activate to get a program running. Data files, on the other hand, are the files that are used by the program files, and contain information such as graphics and sound data.

Many compression programs distinguish between program and data files. While the compression techniques to which such files are subjected are the same, the resultant files remain true to their original form; the program files can still be run as program files and the data files still contain the same information. Unfortunately, there can be problems. While data files can be compressed the program which needs the files may not be able to read them afterwards – it most likely won't contain the code needed to decompress the files before it needs them, so they'll be useless to it. In these cases it's best not to compress the data files.

Of the many different files available, text files compress more efficiently than other files, often to less than half their original size. This is because the data on text files is arranged in a more formulaic fashion while program file data is more erratic and is less well-structured. Many PD disks have compressed DOC files to save space. These need the required loaders to view the program afterwards, but there standard ones do exist such as the Amiga's *ppMore*, which reads text files created with *Powerpacker*.


Multi-Depacker v1.0
THIS PROGRAM WILL DEPACK FILES PACKED BY:
ATOMIC PACKER v3.1/v3.3
AUTOMATION PACKER v2.31/2.4/2.51/5.01
ICE PACKER v1.13/v2.11/v2.2/v2.31/2.34/2.4
FIRE PACKER v1.01/v2.01
JAM PACKER v3.0(LZH)/v4.0(LZH/LZH)
POMPEY PIRATES PACKER v1.9
And this is ONLY v1.0 !!
RELEASED ON THE 2nd DECEMBER 1991

Solely used for decompressing programs, the *Multi-Depacker* can handle the most popular formats

What are decompressors?

Some programs, including some compression programs, can *de*compress files. In other words, they can load a file that has been compressed, then turn it back into its original size. There are several reasons why you may want to do this.

If you've compressed a file using one type of compression program, then find another program that's more efficient at compressing, decompression allows you to recompress the file using the newly-found tool. *Powerpacker* on the Amiga can decompress several popular compacted files, as can *Multi-Depacker* on the ST.

Another reason, useful mainly for code hackers, is that you can decompress a file to examine its code. Normally, unless you disassemble the computer's memory after a compressed program is run, the compressed code is unintelligible to everything apart from the computer and compression program that created it.

If you are protective about your code and don't want people snooping, some compression programs, such as *Imploder*, offer a solution. They offer you the option of protecting your code so that you can't even decompress it using the original program, even if it has a decompression option.

Crunchers compared

There are many different compression programs on the market, too many to list here. They vary in the degrees that they compress files, and the time they take to do it. If you're thinking about doing a lot of compressing, in order to, say, put together a compilation, then the two factors of disk space and timing are vital. To find out which programs are best *Public Domain* has tested some of the more popular compression programs available on a large ASCII text file and a program file:

Amiga

Program file – Original size: 153752

Program	End result	% of original length
Powerpacker	72928	47%
Imploder	88156	57%
Titanics Cruncher	85388	56%

Text file – Original size: 129796

Powerpacker	58904	45%
Imploder	PRG files only	N/A
Titanics	PRG files only	N/A

ST

Program file – Original size: 182477

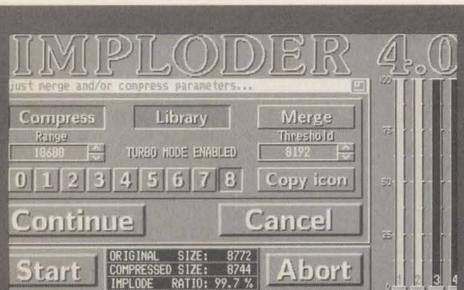
Firepack	131726	72%
Jam Packer	132087	72%
Pompey	132006	72%
4Pac	171241	94%

Text files – Original size: 129796

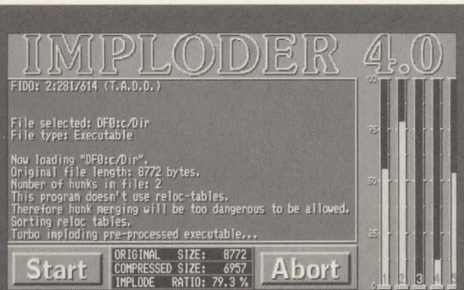
Firepack	55475	43%
Jam Packer	57235	44%
Pompey	58584	45%
4Pac	PRG files only	N/A

In conclusion

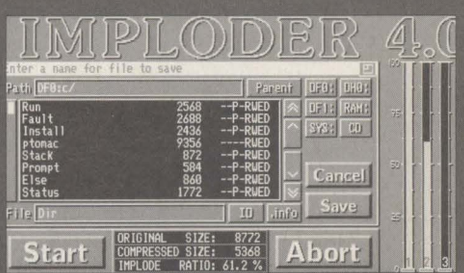
Compression programs serve a definite purpose in PD. They enable you to fit more programs on a disk than you would normally be able to, increasing the value-for-money of those disks. Also, compressed files can be used immediately, unlike archivers which, while they also make files smaller in size, require you to dearchive them before you can use them.



3 **Once the file has loaded you can then set the level of compression you want to use to shrink the file. *Imploder* gives you eight efficiency settings which differ in how long they take to compress a file and how small they make it. Click on Continue to get the compression process on its way**



4 ***Imploder* displays a graph on-screen which shows how much of the program has been compacted and how much longer it's going to take (which isn't usually too long). At the bottom of the screen percentages show how much smaller the compressed file will be compared to the original**



5 **Once the file has been compressed, you are automatically given the option to save it. When you save a file to a disk and want to load it, *Imploder*'s EXPLODE.LIB file has to be in the LIBS directory on the disk you save the file to otherwise it won't load. If it is, run the program normally!**

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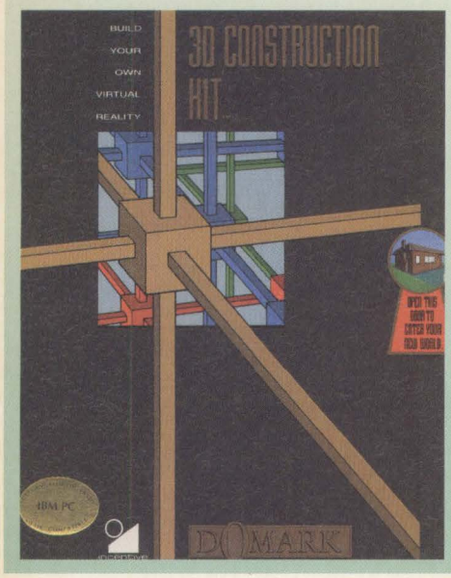

3D Construction Kit

Price £39.99 inc P&P
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SAVE £10

Create your own virtual reality on your PC with Domark's amazing *3D Construction Kit*. This comprehensive package lets you build entire new worlds that you can investigate and navigate from your keyboard.

The package has been designed by the Incentive programming team which has used its Freescape 3D graphics system in a number of popular games such as *Driller* and *Total Eclipse*. *3D Construction Kit* is based on the same principles, but don't worry – you don't need to be a programming genius. Everything is achieved using simple icons and mouse-driven controls which don't require any programming knowledge at all.

Not only can you create your own worlds, you can even produce your own super 3D games that you can release into the public domain. Using the simple controls and the many graphic examples that come with the package, you can get things running in no time. And to help you on your way there's even a short tutorial video included to take you through the program.

So go on, make that leap to virtual reality!

AMOS

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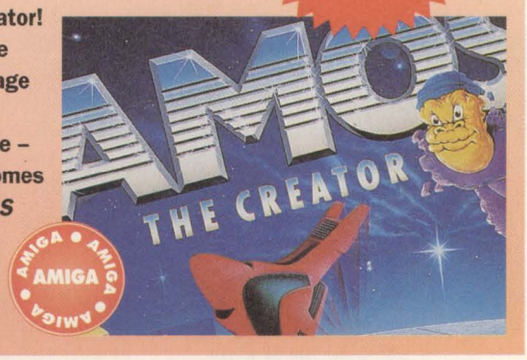
They call it The Creator! A superb easy-to-use programming language for creating games, educational software – almost anything! Comes complete with *AMOS Sprites 600*. The perfect way to launch your career as a PD author!



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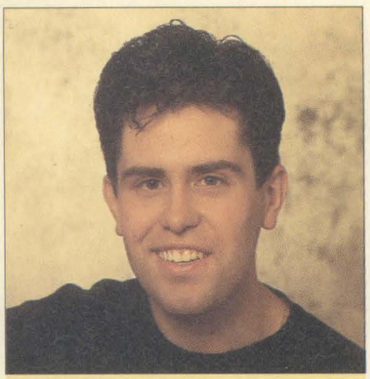

Home & Education

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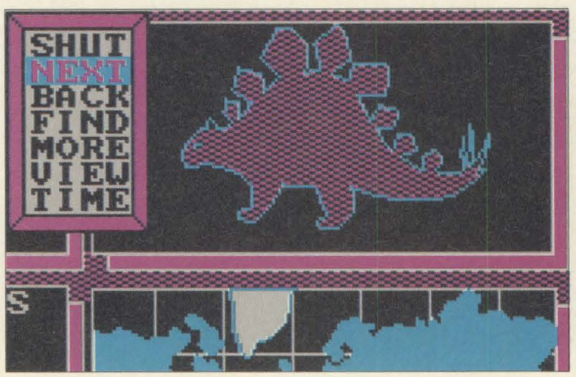
This section definitely features the most eclectic bunch of programs – where else could you find a juggling tutor, a record collector's database and a Highway Code tester under one banner? More to the point, would you find them anywhere at all if it weren't for PD and shareware?

One of the best things about writing this section is that it produces so many surprises. I never know what's going to land on my desk next. One minute I'm despairing of getting another platform game with minimal educational value, or another variation of Hangman when some a little gem of an oddity like *Three-Ball Juggler* for the PC turns up on your desk. It fair makes my day to find something that must have such a limited audience has had so much care put into it.

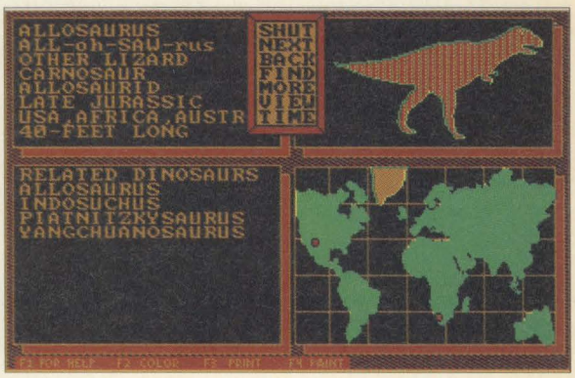
The ST, as usual, has an abundance of excellent educational software. The follow-up to last month's Seal of Approval-winning *Early Learning Maths* is out, and its a corker (slight pun intended – check the review if you want to see what I'm on about).

Amiga software is still a bit thin on the ground, with only the *Total Concepts* series flying the Commodore flag. A couple of Amiga libraries reckon that things will look up in the Autumn, and George Thompson Services tells me that is currently scouring the globe for new sources of software; I wish the company the best of luck...

If it doesn't fit in any other section, you'll find it here. Dave Golder heads the board of examiners on this month's batch of specialist interest and early learning software...



Dinosaurs must have been mightily impressive creatures but in *Dinosaur Data Base* they look more like your gran has just knitted them...



This is a much better colour scheme... Looking beyond the rather lacklustre presentation the database is a valuable source of information

Dinosaur Database

Once upon a time, a long time ago, way before even the first episode of *Neighbours* had been broadcast, the earth was populated by huge lizard-like creatures known as dinosaurs. Even though there hasn't been a thunder lizard (for that's what the name means) spotted for the last 65 million years, they still hold more of a fascination for most kids than any of today's boring bunch of animals.

Dinosaur Database is the rather self-explanatory title of a comprehensive slice of shareware from the States. As a mine of information on dinosaurs it is a veritable source of top quality fossil fuel; it contains entries for hundreds of dinosaurs, from the ones everybody knows about (tyrannosaurus, stegosaurus, tricerotops, etc) to less well-known specimens such as Caenagnathus. But it stops short of producing gold simply because graphically it's about as accomplished as *Roobarb and Custard*. One of the main attractions of dinosaurs is that artists have free rein to make them look as impressive as they like. All you get with *Dinosaur Database* are lumpy outlines (with perhaps an eye if you're really lucky) filled in with patterns that make flock wallpaper look tasteful.

Look beyond the aesthetics, though, and the program is a decent enough catalogue of dino-info. The screen is divided into four windows plus a menu. To choose the dinosaur you want to read about you can either use the Find option from the menu – which entails typing in the first few letters of the dinosaur's name – or step through each entry using the Next or Back options; the entries are arranged alphabetically.

The information is displayed in the windows; one contains the name of the dinosaur plus details such as how to pronounce the name, the time period in which it lived and its average size; a second displays a pretty poor picture of the dinosaur; a third gives a list of related dinosaurs; and the final window shows a map of the world, highlighting two places where the dinosaur lived (why only two I'm not sure). For more detailed information select More from the menu and the world map is replaced with some extra text about the dinosaur in question.

OK, so the graphics are uninspiring, the Find function is a bit slow, and the world map is fairly uninformative, but at least the program is thorough and easy to use. All dino-enthusiasts should at least find it useful.

IN BRIEF

Type	Shareware
Author	Tony Owens
Requirements	512K • EGA
Disk number	E073
Registration fee	$14.95 (£8)

Available from
Wise Owl 32 Charney Avenue, Abingdon, Oxfordshire OX14 2NY
☎ 0235 529808

PC 71%

Early Learning Maths 2

Hot on the heels of the superb Early Learning Maths, this sequel shows you how to solve the problems as well as just posing them...

Sequels are rarely as good as their predecessors, and, while there are exceptions, *Early Learning Maths 2* is no *Superman 2* or *The Godfather 2*. But that doesn't mean it's bad, far from it. It's just that it has such a hard act to follow. *Early Learning Maths 2* is more of an *Empire Strikes Back* – a worthy effort which still outdoes most of its rivals.

The compilation contains five maths games aimed at six- to ten-year olds each featuring that hero of so many Budgie games, Dizzy Lizzy, (basically a blue ball with an inane grin) doing battling against a nasty red blob known as Meanie.

Four of the games are variations on a theme. The player has to answer maths questions: if they get them right then Lizzy is triumphant; get them wrong and the red Meanie does something horrible to our cute, blue hero. So, in one game we get the two blobs using tractors to try and push each other into a pit, the winner escaping in a balloon. In another, they race down a maze-like platform both trying to reach a large red destructor button before the other.

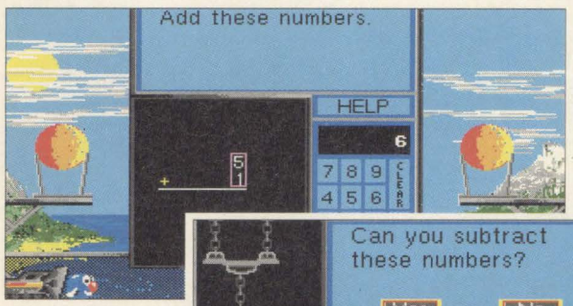
Things get even sillier when they both sit patiently below ten-ton weights; both Lizzy and Meanie try to make sure that the weight above their opponent falls down first by catapulting rocks at the ropes holding them up. Correct answers ensure that Lizzy is more accurate with her aiming. The final game initially has Meanie in the driving seat. He sits in a balloon with Lizzy hanging from the basket on a fraying piece of rope. If you answer the sums correctly Lizzy is lowered to the ground slowly, but wrong answers make Meanie hack vigorously away at the rope with an axe.

You have a choice of addition, subtraction, multiplication and division sums for each these game. There are eight levels of difficulty, ranging up to sums that deal in hundreds, and the player can choose whether they will have to answer three, five or ten question to complete a level. Each of the games features the same way of presenting and answering the questions. A small window shows the sum and next to this is a numerical key pad which you click on to enter the digits. The sums are presented in a traditional layered fashion so that if, say, you are adding together 34 and 52 one figure will be below the other with the mathematical function next to the lower figure.

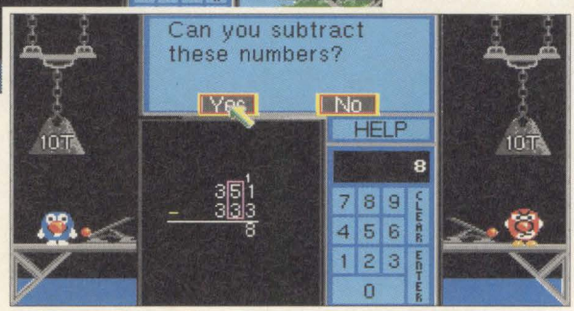
The program forces the player to enter answers one column at a time. So in the example above it would ask for the answer to four plus two first, then three plus five second to come up, with the answer 86. The use of these techniques on the lower, simpler levels provides a good basis for the more complex, later levels. When you have a tricky piece of long multiplication or division the program leads you through the sum one step at a time.

The graphics are of a very high quality, and the animation is simplistic, but functional. Neither feature the charm evident in the original game, however, which is a shame. The sound and music is downright irritating in places and it's one of those games that really has to be played with the sound turned off – you don't miss much. What it does have going for it, and this is the major bonus point in the program, is that it presents its educational elements in a clear and informative fashion. The way the sums are approached is excellent; as opposed to expecting the player to already know how to work out the answers, this program helps them to work the problems out if they're having difficulty.

Flawed, but still excellent.

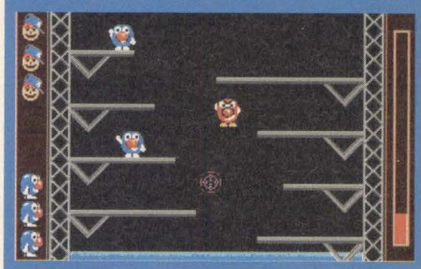


The gameplay in each game consists purely of answering sums, but the scenarios change. Here Lizzy and Meanie race for the balloons



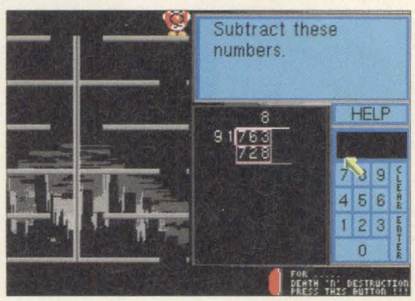
The program encourages users to go through the sums one stage at a time showing, for example, how figures are carried over

Wot, no learnin'?



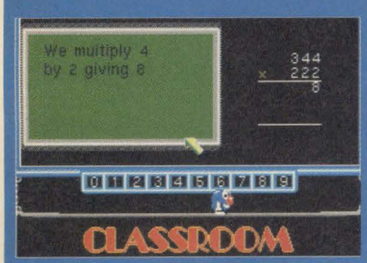
One of the games, *Meanie Blaster*, appears to have no educational value whatsoever, but it is good fun. Basically it appears that Meanie has been cloned a few dozen times and the player has to polish them all off. They appear on platforms, rush to the end and fling themselves into space. The player has to blast them before they hit the ground using a mouse-controlled crosshair targetting device. Bombs, which also have to be blown up, and Lizzies, which don't, also put in an appearance. All a bit pointless really but provides some light relief.

Get the answers correct and Lizzy is let down slowly. Get them wrong and, well, it's a long way down...



Argh!! It's a nightmare – long division. But the program helps you find the answer

When all else fails you need some help



	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

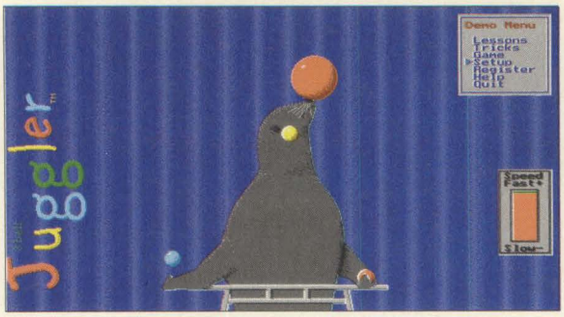
There is a Help option which the player can use at any time to either call up a maths or multiplication table, or be taken to 'the classroom.' Here Lizzy demonstrates how to do the sums step-by-step. Be warned, though: if you use the Help option Meanie will win that round.

IN BRIEF

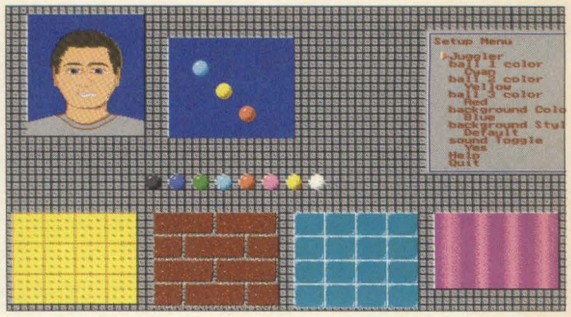
Type	Licenceware
Price	£3.95
Author	Philip Rankin
Requirements	512K
Disk Number	PRO27ST
Available from	Riverdene PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 0734 452416

ST 81%

Juggling can be as easy as one, two, three, especially when you've got a handy tutorial program like this to help you out...



You have a choice of juggling tutors and not all of them are human



You can choose the colour of your balls as well as the background pattern

Three–Ball Juggler

Juggling is one of those things that most people have a go at sometime in their life; a few broken window panes later and they usually give it up as a bad job. A lot of this has to with the fact that they try to do too much too soon, and also that they don't know the basic concepts behind juggling. A lot of people think the balls have to go in a circular fashion, where you throw one ball up then pass another from one hand to the other.

The actual basic juggling technique – called a Cascade – is more like a sideways figure of eight, with the balls crossing each others' paths. This may sound far more complicated, but in fact it is far easier and faster to learn to juggle this way because a lot of the time you only have one ball in the air whereas with the circular method, there are always two balls in the air. *Three-Ball Juggler* reckons most people can master the basic cascade technique in less than an hour and shows you in a set of clear and simple lessons how to go about it. And once you think you've got it licked, the program has a lot more on offer to develop your three-ball skills.

The program is very classily-presented. An animated figure demonstrates how you should throw the balls, and the paths the balls take is shown on screen. Brief but handy annotations tell you what you should be aiming to achieve with each throw. More detailed notes down the left-hand side of the screen give further details about technique, and occasionally some handy hints.

The lessons are broken down into basic steps. It starts off showing you how to throw one ball; this may not sound very tricky, but a few minutes practising throwing the ball at the right height is essential. Then it shows you how to throw with two balls, then three. Finally it encourages you to keep the balls moving in a continuous pattern. With each of these steps its suggests that you don't move on to the next until you can do the current one ten times without any errors.

You're shown the correct path the balls should take

Once you've got the hang of the basic cascade there is a section on trick shots, which is as clearly laid out and explained as the previous section, but, perhaps because of its very nature, is slightly more difficult to follow; you have to study the animation very carefully to work out what is going on.

The program is controlled through a series of menus and is extremely easy to use. The presentation is excellent, with simple but clear graphics and animation, even if the jugglers' arms are a bit spindly. There are plenty of aesthetic options so that you can change the colour of nearly everything; there is also a choice of jugglers, which includes a seal!

It's a great program that fulfils its aims almost perfectly. I must admit, I still can't juggle because I've got the co-ordination of an ice-skating giraffe but it certainly made trying a lot more fun than learning out of a book. And the game that's included isn't half bad either. You can either register for $15, or send off $25 to receive two extra programs – would you believe *Four-* and *Five-Ball Juggler*?

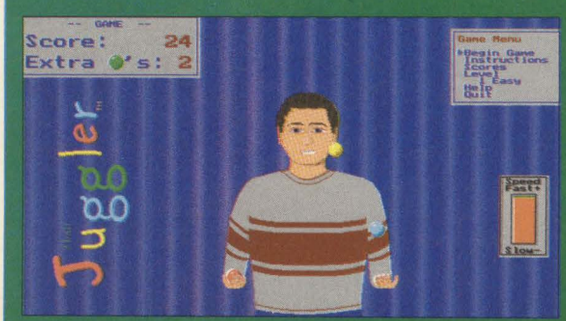
But what do you do if you haven't got any balls?

To help understand the basic principles behind juggling the program includes a game. It's a relatively simple affair – I don't reckon it'll be giving Apogee or Jeff Minter a run for their money – but it's quite good fun and, to a certain extent, helps hone certain skills that you will need in real juggling.

Basically you control the jugglers hands using the two shift keys to control how he throws the ball. There are three levels. On the easiest you just press the keys when you want him to throw; the computer will make sure that the path is always perfect. On the medium level, the longer you hold the Shift keys down, the higher the juggler will throw the ball. On level three you are required to do some trick shots, by catching balls in the same hand that threw them; the computer indicates when you have to do this with the use highlighted arrows while holding down CTRL plus ALT plus Shift simultaneously performs the feat. You can perform the trick shots on the first two levels if you want, but don't get you any extra points, just the satisfaction of knowing you can do it.

The aim of the game is to keep the balls in motion for as many throws as possible. You are allowed to drop the balls only five times and the computer keeps track of the number of throws. The scoring system is based on the number of throws, the speed at which you play and the level.

The controls are very positive and the game runs very smoothly. It can become a tad dull after a while, but you can always attempt a few trick shots to liven things up, and it is certainly a great way to learn about the mechanics of juggling – but there's nothing like the real thing.



In the easy level of the game you just press Shift when you want the juggler to throw; the height of the throw will always be perfect

By the hardest level you have to control the height of the throw and you are also required to do some trick shots, indicated by the arrows

IN BRIEF

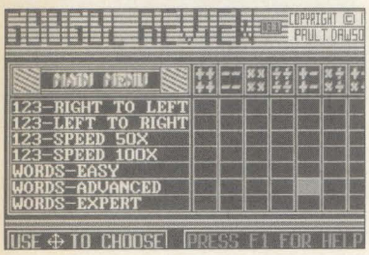
Type	Shareware
Author	First Magnitude
Requirements	EGA • 512K
Registration fee	$15 (£8)
Available from	Testware, 46 The Avenue, Harrogate North Yorkshire ☎ 0423 886415

PC 90%

Googal Review 3.1

Not all sequels are straight rehashes of the original. Sometimes the only similarity is the name, as anyone has seen *Halloween III* will testify. *Googal Review* is another example; the difference is that unlike *Halloween III*, *Googal Review* is actually pretty good.

Googal Maths Games (reviewed way back in issue two) contained a number of arcade-style games which required the player to work out instant mental arithmetic problems to get through the levels. While this honed mathematical skills it didn't actually teach the player anything. *Googal Review* has less gameplay – basically the player just answers maths problems – but a lot more educational value.

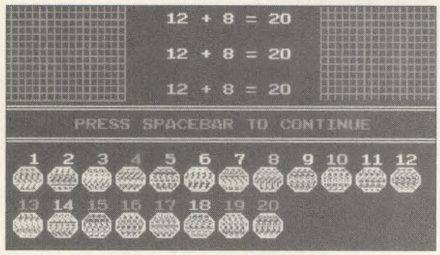


From the selection screen you can choose which game you want to play and on what level

There are three different sorts of challenges on the disk, all suitable for five to eight year olds:

- Straightforward sums presented in a traditional style, ie, one figure above another with the mathematical function next to the lower figure. This is subdivided into two levels with the player either entering the answers digit-by-digit from right to left, or from left to right.
- Answering problems against the clock – the player can choose whether to answer 50 or 100 questions and the program keeps a check on how long it takes them.
- Word problems – the sums are wrapped in little stories of the, "If Johnny has twelve apples, then mashes them up and divides them between 20 civil servants how many votes would the Monster Raving LOONY Party party get?" variety.

What makes the program so good is that if the player has difficulties with a particular sum, after three attempts it shows them how to work it out using simple graphics and easy-to-understand explanations. The player can also request this help at any time with a press of the X key. In the timed sections the player gets as many tries at getting a sum right as they need, the only penalty being loss of time.



When you get a question wrong the program helps you out with some graphically-presented examples

The clearly-designed main menu screen offers the player the opportunity to tackle the problems using just addition, subtraction, multiplication and division sums or combinations of any or all of these functions.

The main link between *Review* and *Maths Games* is the visual and audio presentation. The graphics aren't exactly breathtaking but there's an abundance of simple animated effects that makes the program come across as very lively. The various ways the program congratulate the player when they get an answer right are quite inventive. The sound also makes the most of some very limited source material (the PC's 'bleep') and for once actually enhance the program as opposed to making you want to turn the sound off completely. The self-consciously 'cool' language – with phrases like 'wocka, wocka' and 'right on' bandied about – is a bit forced at times, but should appeal to kids.

Good, solid educational shareware.

IN BRIEF

Type	Shareware
Author	Paul T Dawson
Requirements	640K • CGA
Disk number	E079
Registration fee	$10 (£6)

Available from:
Wise Owl, Wise Owl 32 Charney Avenue, Abingdon, Oxfordshire OX14 2NY ☎ 0235 529808

PC 74%

Play Spell

Platform games are the staple fare when it comes to computer leisure and so the idea of disguising educational software in this genre is a logical, but so far not very successfully achieved, idea. Apogee has tried and failed wit *Word Rescue* (reviewed last issue) and *Play Spell*, another very polished game, suffers from similar problems; the gameplay is quite advanced but the educational element is aimed squarely at the very young, so the kids who might benefit from the program will find it frustratingly difficult while older kids will be put off by the spelling aspects which will be far beneath their capabilities.

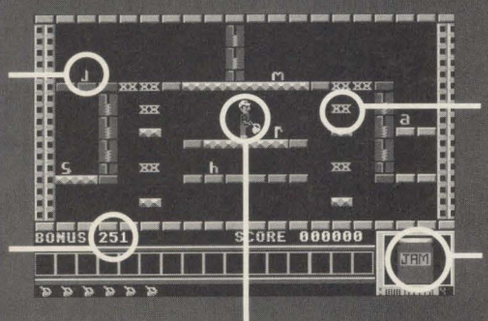
Play Spell has 20 levels, each containing a series of platforms. Scattered around the levels are letters, some of which will spell a simple word indicated by a picture at the bottom right of the display. The aim is to collect the letters in the correct order. This is done by controlling some sack-carrying obnoxious-looking brat using the joystick. He leaps about the platforms and walks into the letters to collect them (God knows why – logic isn't one of the game's strong points).

The player starts the game with six sacks, each sack equating to a life. Lives are lost every time the brat walks into an incorrect letter. When this happens the brat swings the sack around and lets out an evil, irritating laugh. Quite why I'm not sure; isn't he supposed to be on the player's side?

Once all the letters have been collected it's on to the next level. How the scoring works I'm not entirely sure; it seems totally bizarre, and the accompanying document files don't shed much light. One thing's for sure; for every 500 points you get an extra sack. There is a possibility of earning bonus points too, though it's only very slight. At the start of each level the bonus starts at 400 but this decreases rapidly. If you manage to complete the level before the counter reaches zero you get whatever value is left added on to your score. I only just about managed to get a few measly points on the first level; by the third, not a hope.

The platforms are all well-designed and some require a fair amount of puzzling out; there are blocks that disintegrate when you stand on them and others that appear and disappear that you have to take into account. Purely as a game it works fairly well, though the controls are a bit over-sensitive which doesn't make matters easy. But educationally... well, let me leave you with this thought: there are always the same words to find on each level every time you play the game. Not much of an intellectual challenge, is it?

Who you are and what you need to do



The first letter you have to collect. All you have to do is walk into it

These bits of platform flash in and out of existence, so watch your step

Complete the level before the bonus reaches zero and you get the points that are left

The picture here tells you the word and letters you need to collect

This is who you control using the joystick. Not a very nice character and he has the worst laugh ever

IN BRIEF

Type	Shareware
Author	Kidware
Requirements	512K
Disk number	M026
Registration fee	£5

Available from:
PD4U, 4 Sintonville Avenue, Belfast BT5 5DG ☎ 0232 672338

ST 70%

States and Counties

Geography as taught in schools these days is about more than just learning a list of places and where they are; complex theories on plate techtonics and workforce distribution are more the order of the day. But it's still important to know the basics, and this program is a much better way of getting to know what's where in the UK and the USA than poring over a grotty old atlas.

There are five volumes: one features English counties (though the section is called *Counties of Britain*, tut, tut); two covers the counties of Ireland; Wales and Southern England are featured in volume three (well, Wales only has nine counties so something else had to be bunged in to make it more interesting); Scotland gets the treatment in volume four; and it's a quick trip across the Atlantic to the good ol' US of A for volume five.

Each plays in exactly the same way, so let's take *Counties of Britain* as an example. It begins with a map showing the outlines of all the counties in England. The computer chooses the county for you to name and indicates it with an arrow. You have to type the name into a window then press return. If you are correct an info screen opens telling you the area of the county in hectares, the city that is the county seat, the rateable value of the land, the population and any other interesting information (such as that the Beatles made Liverpool world famous).

A press of any key takes you back to the map screen and the county you named is marked in red. If you type in the wrong name you still get the info screen, but the county is coloured in yellow on the map. A thermometer on the screen keeps track of how many correct answers you've had, and at the end the program tots up and tells you how many you got right and wrong.

Aside from knowing which counties are which, you also need to know how to spell them (which is especially tricky when you're doing Wales). There also seems to be glitch with the US program; even if you manage to identify Maine correctly, you're told that you have got it wrong.

But despite these minor niggles the program is fun and functional, and keeps you going back for more; you keep wanting to improve your score and prove to yourself that you really *do* know where Maryland is.

The dark areas (red when you see them in colour) are the ones I've got right – strange how most are on the coast...

Things are a bit more fiddly when it comes to naming the Scottish districts, especially with all those islands

IN BRIEF

Type	Licenceware
Price	£3.95
Author	Mike Duncan
Requirements	520K • Double-sided drive
Disk number	BU98

Available from:
Floppyshop ST, 45 Provst Graham Avenue, Hazelhead, Aberdeen AB1 8HB
☎ 0224 312756

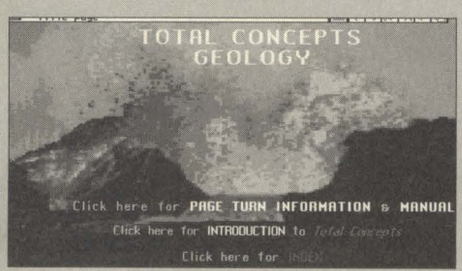
ST 76%

Total Concepts Geology

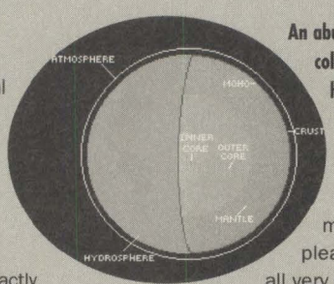
The *Total Concepts* series of computerised text books seem to be well into its swing now, and improving all the time. This second full shareware release is far better than the previous release – *Dinosaurs*, which was reviewed last month and wasn't at all bad – and, if we are to believe the blurb in *Geology*'s doc files, the next release, *Astronomy*, could surpass them both (with pictures every two or three pages promised!)

In terms of the quality of the text, though, it will be quite a feat if *Astronomy* outdoes *Geology*, because, putting aside the annoying amount of grammatical and spelling errors, it is a very interesting and informative read. Whereas *Dinosaurs* was a bit dry, *Geology* actually exudes enthusiasm for the subject from every screen.

The format of the book is exactly the same as for the previous release; basically you can flip back or forth through the text page by page using the icons at the top of the screen, or you can call up the index and go to any page immediately by highlighting it. On various pages there are hot spots in which you click to bring up diagrams, pictures or tables of information. You can pull down menus which give you options to print pages (though not pictures) search for text, save your position and other operations that make browsing that much more of a pleasure. It's all very friendly to use, if occasionally a tad slow.


TOTAL CONCEPTS
GEOLOGY
Click here for PAGE TURN INFORMATION & MANUAL
Click here for INTRODUCTION to Total Concepts
Click here for INDEX

A click here and a click there and you have access to everything you ever wanted to know about geology



An abundance of clear, colourful diagrams help liven up the book no end

Geology is aimed squarely at GCSE students taking Physical Geography. It covers such subjects as volcanic activity, rock formation plate techtonics, earthquakes and Earth's position in the Solar System. There are loads of diagrams and a fair few pictures to help liven things up. The text is very easy-going yet packed with information, and the layout of the pages is generally uncluttered.

This time around a couple of pictures created using *Vista Pro*, a commercial fractal mountain generator, have been included, though I'm not sure if they add anything. If you know the package they are quite impressive in terms of technical quality – apparently they took over four hours to generate each – but in term of Geology, digitised pictures of the real thing would have been of more use. Still, they are pretty.

If you have an Amiga and you or your kids are doing Geography GCSEs at the moment, this really is an essential purchase, It won't guarantee you a pass, but it should make trying a lot more interesting.

IN BRIEF

Type	Licenceware
Price	£4.50
Author	Chris Hill
Requirements	512K

Available from:
Vally PD, PO Box 15, Peterlee, Co Durham SR8 1NZ
☎ 091-587 1195

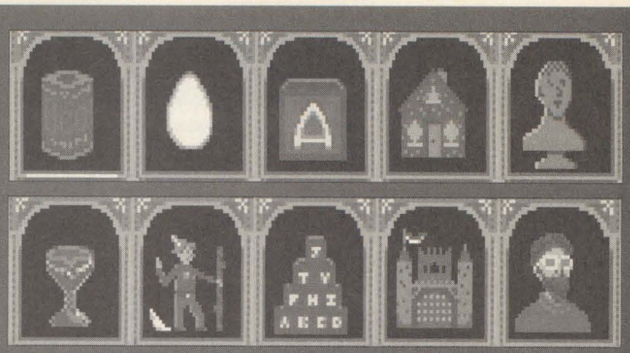
AMIGA 80%

Not only does The Magic Speller talk, it even recites poetry. But will kids be able to understand what it's talking about...?

It's a kind of magic

"Every time you spell
Three words well,
One of these things will change
Into something strange."

And indeed, they do. The top row of pictures were what I had at the start of the game. After 15 correctly-answered question they had mutated into the bottom row. OK, I can just about the handle the building bricks multiplying and the house turning into a castle, but an archer hatching out of an egg...? Was Salvador Dali one of the programmers?



To encourage the user to spell the words correctly there are little icons at the top of the screen which mutate when you get three questions correct

The Magic Speller

Imagine being taught English by a Dalek with a speech impediment using a British Rail tannoy system and you've got some idea of what playing *The Magic Speller* is like. Yep, it uses disgitised voice sounds; in fact, they are integral to the game as you wouldn't be able to play if you couldn't hear what the computer was asking you. But don't let that put you off because the program manages to rise above this rather poor premise, and is actually rather good, if not so much for its gameplay as its facility to be customised.

The game is suitable for four- to seven-year olds, but unless your kids are fairly computer-literate, a parent should be around to supervise things such as file selection. The gameplay is very basic, but the presentation lifts it enormously. The display has a row of five small pictures along the top – houses, eggs, jars, hats, that sort of easy-to-draw stuff; the digitised computer voice tells the player – in rhyme – that if they spell three words well something magical will happen to one of the pictures. Ohh! Can't wait.

Next it asks the player to spell a word, and they have to type it in on the keyboard. Don't worry if it is impossible to work out what it's saying as a clue will appear at the bottom of the screen. As the player hits each key the letter appears on-screen, and the digitised voice reads it out as well. If they make a mistake, and realise it, letters can be erased using the backspace, accompanied by a computerised, 'oops'.

THE MAGIC SPELLER
BACKSPACE takes a letter away
Any number key to hear the word again!
Your Spelling: DYING
DYEING
SCORE: 3
- is giving cloth a colour

No, it hasn't got it wrong. If you check the clue at the bottom you'll see why dyeing is spelt this way

If the word is spelt correctly, one is added to the score. If it is wrong the computer shows how it should be spelt. After every third correctly-spelt word one of the pictures changes in a simple six-frame animation; they're not exactly Disney-threatening, but a fair enough inducement to get the words right.

Undoubtedly you will receive a decent selection of these files when you get the program, but as this is a PD program, and it comes with a question file creation utility – *Make File* – a lot of them will probably have been created by previous users; it might be a good idea for parents to check through the files first to make sure that the spellings are all correct. Anyway, you can use *Make File*, which is an extremely friendly utility, to create new question files yourself; it should only take a few minutes.

OK so the voice isn't Queen's English-quality, but it's good enough to stop the program from getting by purely on novelty value, though this is an element the program has in abundance.

IN BRIEF

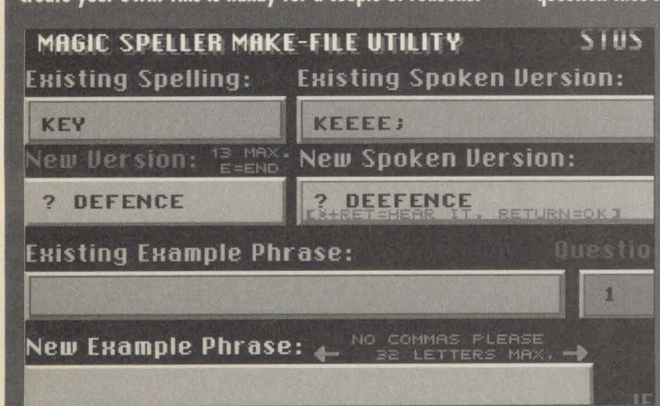
Type	PD
Author	Jim Flewker
Requirements	512K
Disk Number	3014C

Available from:
Floppyshop ST, 45 Provst Graham Avenue, Hazelhead, Aberdeen AB1 8HB
☎ 0224 312756

ST 79%

Bored with spelling the same old words? Then create your own sets of questions

You don't have to live with the sets of questions that come with *The Magic Speller* because it comes with a supplementary program, *Make File*, that enables you to create your own. This is handy for a couple of reasons. First it means that your kids don't become too familiar – or bored – with the sets that you receive with the program. Also, because the program is PD a lot of the question files may have been created by previous users, and there's no guarantee that they knew how to spell properly. Although the version I had was relatively spelling mistake-free there were a few grammatical errors; have you ever heard of the word 'politer'? – I think they meant to say, 'more polite'.



You need to tell the program the way a word should be spoken

Make File is fairly straightforward to use. It enables you to enter new words, instruct the computer on how the digitised voice should pronounce them and type in the clues. You can either choose to edit existing files (in which case you can eliminate a few spelling errors) or create a new one by entering a new name, and remembering to add the file extension SPS.

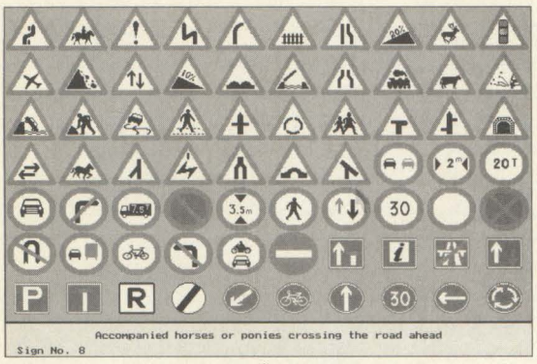
Words can be up to 13 characters long, clues can be up to 32 characters. When you enter a word and press Return, the computer speaks it. If it sounds OK, fine. But some words may sound strange. Defence, for example, will be pronounced, DEF-ENCE unless you instruct the computer otherwise. And this is dead easy; just type DEEFENCE into the correct panel and the two Es elongate the first vowel sound. Alternatively colons after letters mean that the sound is cut short.

The number of words you can enter into a file seems limitless, but frankly, there's little point in entering many more than 20; there are only five animated pictures in the main program and these are activated after every third correctly-spelt word. More than 20 questions will lessen the incentive to get as many correct answers as quickly as possible.

Roadsigns Challenge

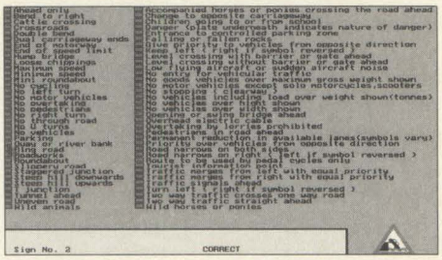
Driving tests can be a nerve-wracking experience. As if the actual driving side of things weren't bad enough, these examiners also expect you to know all about the Highway Code. Learning what all those roadsigns mean from a book can be pretty dull, and consequently most novice drivers forget to brush on their theory until the last day or so. Thankfully the public domain has an alternative to the Highway Code book in the form of *Roadsigns Challenge*.

The format is simple; you have to match road signs to their descriptions. There are two parts to the challenge; you can choose to either match a description to a sign selected by the program or match a sign to a description given by the program. In both cases there are 70 different signs which is a fair old selection, but not complete; a lot of motorway and parking signs (which have a habit of cropping up in tests) are missing.



No, not a scene from a learner driver's nightmare, but perhaps something that can help them out – a game based on the Highway Code

If you decide you want to have a go at matching the signs to descriptions chosen by the program you are presented with a screen displaying all 70 road signs. You have to answer 20 questions. The descriptions pops up at the bottom of the screen and you have to move the cursor to the correct sign using the mouse or the cursor keys. If you select the wrong sign the correct one is highlighted. The question numbers are displayed on-screen so that you know how many you have left to go, but there is no running score. You are only told how well you have done when you've answered all 20 questions.



The section where you have to pick the description to match the sign is cramped to say the least

When you have to match the descriptions to a program-selected sign all 70 descriptions are displayed on-screen. As you can imagine this makes things more than a mite cramped. When the sign appears, you have to select the correct description and click in an extremely tiny space next to it. Unfortunately because the text is so microscopic, finding the correct description can be a frustrating task, even though they are arranged in alphabetical order.

Because the program selects the questions randomly you quite often get the same question asked a number of times in each set of 20. The author claims this helps the learning process, but it sounds more like a cop-out to me.

Despite being a bit basic, and lacking in the imagination department, the program is a very handy alternative to swotting with a dog-eared copy of the Highway Code. What's more it's easy to use and reliable. Register for £12, and besides making Douglas Fisher a happy man, you'll receive a copy his *Know Your Highway Code* disk. Not quite a guarantee that you'll pass first time, but it'll sure help.

IN BRIEF

Type	Shareware
Registration fee	£12
Author	Douglas Fisher
Requirements	512K • EGA
Available from:	
Wise Owl 32 Charney Avenue, Abingdon, Oxfordshire OX14 2NY ☎ 0235 529808	

PC 74%

Word Race

With the Olympics this summer it's quite fitting that there should be a spelling game for kids based on athletics. Your kids can pretend they're Carl Lewis racing for gold, or if they want to cheat and use a dictionary I suppose they could always play at being Ben Johnson instead.

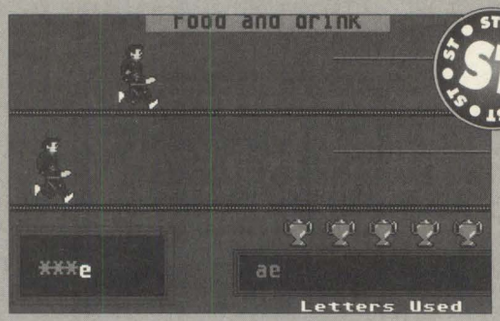
The game is basically yet another Hangman in disguise – these seem to be replacing *Match Pairs* variations as the flavour of the moment in early learning software. This time around the setting is an athletics event, and the player has to help his runner reach the ribbon first.

There are nine word categories from which to choose: Seaside, Colours, School, Birds, Trees, Clothes, House, Food and Animals. The words range from three to six letters and there's nothing too obscure – the program won't expect your child to know about birds like the rare New Zealand Kea, for example.

There are nine categories of words to choose from. Why are there never ones like Major Earthquakes or Great Air Disasters?

Having selected their category, the player is taking to the racing screen. The player's athlete is in green, while the computer controls the one in blue. A digitised voice – female for a change – tells the player to, "Get ready" in time-honoured Shoestring tradition and then the runners are off. A blank grid of the length of the word you have to reveal pops up at the bottom of the screen. The player chooses letters from the keyboard. If they pick a letter that's in the word, then it appears in the correct position in the word grid and the their runner makes a dash for it. If the player picks an incorrect letter, then the opposing runner takes his chance.

It's a bit of an unfair race. It takes about nine incorrect letters for the opposing athlete to reach the winning line, but if the word only has three letters, the player only needs to find those three for their athlete to win.



There are five heats per match and the athlete with the most trophies wins; none of that, "It's the taking part," nonsense here

That's not the Olympic spirit! (But I suppose there are 26 letter from which to choose.) All the letters chosen appear in an on-screen panel which is handy; it prevents the player from fruitlessly pressing the same letters keys over and over again.

The program makes good use of sound fx and simple animation, but the presentation, while clear functional, is not very exciting. There's also no sense of carry-through; each game is an entirely self-contained unit, and there are no features such as difficulty levels or high score tables.

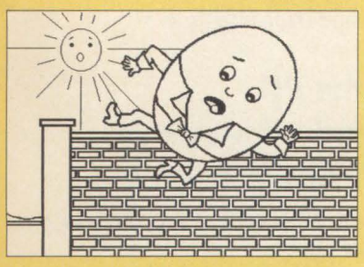
Word Race is pretty basic stuff – not bad, but hardly gold- or even qualifying heats-winning material.

IN BRIEF

Type	Licenceware
Author	Ian Holden
Requirements	512K
Disk number	SES07C
Price	£2.95
Available from:	
Floppyshop ST, 45 Provst Graham Avenue, Hazelhead, Aberdeen AB1 8HB ☎ 0224 312756	

ST 69%

Dinosaur Traks/ Fairytale Traks



Humpty Dumpty is one of the many nursery rhyme characters in *Fairytale Traks*

Black and white slideshows for pre-school kids that can be coloured in so long as you have a suitable paint package – that just about sums up these two disks.

The dinosaur disk contains one slideshow of fairly featureless prehistoric animals along with some brief information about them. *Fairytale Traks* has far more detailed pictures, and a lot more of them, too, some of which are very appealing.

As opposed to simply popping up on screen, the pictures actually appear in a variety of ways, which is a nice touch and makes the program a little more exciting. Some will reveal themselves a block at a time, others appear as a series strips.

The *Fairytale* disk is by far the better of the two, but if your child wants to colour the pictures – which can be done by loading them into an art package such as *Spectrapaint* – then the ones in *Dinosaur Traks* are far easier for very young kids to fill in.

IN BRIEF

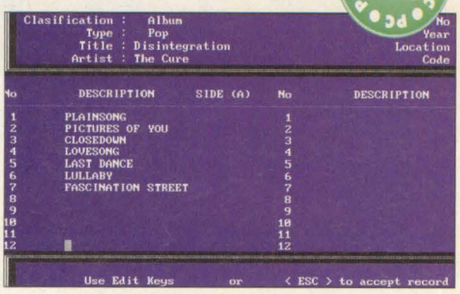
Type	PD
Author	Centrepoint Software
Requirements	512K
Disk number	Education 14/15

Available from
George Thompson Services, Cucumber Hall Farm, Cucumber Lane, Essendon, Herts AL9 6JB ☎ 0707 664654

AMIGA 65%

Record Library

Keeping a record of your records can be a bit of a chore using pen and paper – you're likely to end up with a card index which is almost as large as your music collection. That's where a specialised database can come to to the rescue, and *Record Library* fits the bill perfectly.



If you want to track down that track, *Record Collector* has an excellent Search facility that can help you out

It is a very simple to use program which enables to fill in all the details of your CDs, LPs, cassettes or even videos you could ever need. As well as title, artist and track listing, you can also enter type (rock, soul, jazz, classical, etc), catalogue numbers, format (LP, CD, 12-inch single, 78s, etc) and even counter settings for videos.

You can search for entries using any of the variables, including individual track listings or even catalogue number. The text editor used for entering or altering details is a step above average quality for this type of program and is straightforward to use.

It is undeniably a good program that does its job excellently, but there is one major drawback; at a registration fee of £34.95 it seems very over-priced for what is essentially a glorified PD database. And would-be pirates who treat registration fees with contempt will have no joy either; the shareware version of *Record Library* is limited to a mere 20 entries.

IN BRIEF

Type	Shareware
Registration fee	£34.95
Author	Thetford Software
Requirements	512K • CGA

Available from
Southern Shareware International, 21 Newberry Road, Weymouth, Dorset DT4 8LP

PC 70%

Magnadoodle

You too can create a complete mess that with *Magnadoodle* – it's difficult to do anything else

Magnadoodle, so its documentation tells us, is an expanded version of the *Doodle* section of BWare's very own *Master Time*, with a control system specially designed for kids. Um, well, I'm not sure about the validity of the last part of that statement – the program seems unnecessarily complicated to me, requiring more frantic clicking than a geiger counter at Sellafield – but there is no denying that its range of features is mightily impressive.

As well as all the normal drawing tools – freehand circles, rectangles, flood fills – there are a number of unusual items. There is a text option, you can draw lines that come out in random colours and a large collection of full-colour clip art that you can paste on to your pictures in any position. There is a wide selection of line thicknesses and fill patterns from which to choose, and the colours can be customised using RGB sliders.

It's a shame that the control system is so awkward, because this program has so much going for it. It's not impossible to use, but it is far from the most intuitive program ever. As such most kids probably will just doodle with it, as opposed to exploiting it to its full potential.

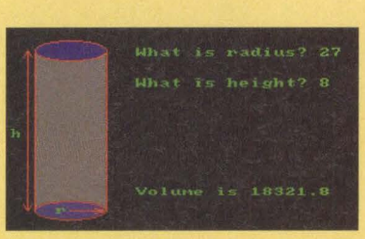
IN BRIEF

Type	Shareware
Registration fee	£5
Author	BWare
Requirements	512K
Disk number	A004

Available from
PD4U, 4 Sintonville Avenue, Belfast BT5 5DG ☎ 0232 672338

ST 79%

AMOS Maths Calculator



In the Areas and Volumes section you feed in the data and the program works out the answers

This is a rather pointless collection of very simplistic maths programs with one saving grace.

It is divided into sections such as Addition and Subtraction, most of which contain very dull maths games aimed at primary school kids. The graphics are laughably simplistic, and the sound forgettable and the gameplay non-existent – the player merely has to answer simple sums. There are no awards or incentives, such as funky pieces of animation or fanfares. None of the programs give any tutorial help, either.

However, the Areas and Volumes section is pretty good, though again, pretty simplistic. Covering a variety of shapes and solids, the program requires the user to fill in values and it works out the answers. OK, so this stretches a computer about as much as Olive Oyl would Rosanne Barr's knicker elastic, but the diagrams and maths theory are clearly presented making this section useful to kids studying areas and volumes at school.

IN BRIEF

Type	PD
Author	Simon Jewell
Requirements	512K
Disk Number	U364

Available from
Boot-Up, Computer Home Supplies, 30 Sunnings Lane, Corbets Tey, Upminster, Essex RM14 2DQ ☎ 0402 221591

AMIGA 69%

PC FORMAT THE MODERN GUIDE TO PERSONAL LEISURE COMPUTING

GET THE BEST IN PC LEISURE

TWO DISKS, £35 WORTH OF SOFTWARE AND THE DEFINITIVE REVIEW OF THE BEST PC GAME EVER

MORE THAN £35 WORTH OF SOFTWARE ON TWO DISKS FOR £3.95

Issue 9 of *PC Format* is at a newsagent near you from May 28 and will open up the world of PC entertainment. Not only is there a full musical accompaniment program, *Band-in-a-Box*, worth £35, inside there's a review of *Ultima Underworld*, the best game ever on the PC.

The magazine is packed with everything you need to know about enjoying your PC. We compare all the latest games bundles to find the best, bring you the truth behind multimedia hype, go behind the scenes at Spectrum HoloByte (creator of *Falcon*) and review the latest games, including *Ultima VII*, *Jack Nicklaus Golf*, *Heimdall*, *Dune* and *Pacific Islands*. All this plus regular columns on CD-ROM, music, shareware and playing tips.

PC FORMAT
June 1992 ■ Issue Nine
3 .5-inch disks with this copy – also available with two 360k 5.25-inch disks
£3.95
The Modern Guide To Personal Leisure Computing
TWO DISKS! COMPLETE PROGRAM WORTH MORE THAN £35
THE GAME THE PC WAS MADE FOR
Ultima Underworld – the definitive review
PC FORMAT DISK 1
ISSUE NINE
BAND-IN-A-BOX Version 4.03
ZONE distribution
This month's full program is a musical marvel. With Band-in-a-Box you can create your own chord sequences and play them back in numerous styles, from rock to waltz to jazz
PC FORMAT DISK 2
ISSUE NINE
PACIFIC ISLANDS
The playable preview of Empire's all-action tank game
FONTS FOR PFS: FIRST PUBLISHER
More than 150 fonts for use in desktop publishing
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Find out which is the best of the PC games bundles
25 page game rev
including Pacific
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PLUS: latest version of Windows reviewed ■ profile of the creators of Falcon ■ we investigate the Euro PC boom

For all this and more, make sure you get issue 9 of *PC Format* on May 28 – it's the indispensable guide to PC entertainment

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So you think that there's been some good home and education stuff reviewed this month's Home & Education section? Well there's plenty more where that came from and we've covered a fair few classics in our first seven issues. Here's a reminder of the ones that really blew our socks off...

PC

❶ Compu-Chef — Issue 3 — 92%

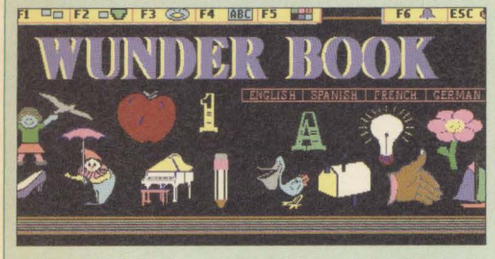
PDSL, Winscombe House, Beacon Road, Crowborough, Sussex ☎ 0892 663298

If you're seriously into cooking then you seriously need this program. Packed with recipes, *Compu-Chef* is easy to use and very well-presented.

❷ Wunderbook — Issue 2 — 88%

Softcell Services, 25 Maywood, Drunna Pontydun CF7 9PT ☎ 0443 238630

The fun way for young kids to learn the foreign names for familiar everyday objects. Colourful and simple to use, it covers French, German and Spanish.



A fun way for kids to learn the foreign names of everyday objects

❸ Funny Face — Issue 2 — 87%

Softcell Services, 25 Maywood, Drunna Pontydun CF7 9PT ☎ 0443 238630

A bit like a police photofit, *Funny Face* is a great fun program for kids all about creating fizogs from a wide selection of facial features.

❹ Save The Planet — Issue 2 — 85%

Fantasia Shareware, PO Box 1231, Clutton, Bristol ☎ 0761 453716

A comprehensive one-off diskzine covering all things green. Lots of frightening figures and some practical advice on what you can do.

❺ Meal Master — Issue 6 — 80%

SMS Shareware, 19 Corshalton Road, Camberley, Surrey GU15 4AQ

Not as good-looking as *Compu-Chef* (see above), but offers the same facilities, and there are also loads of *Meal Master*-compatible menus floating around on BBSs.

❻ Henrietta's Book of Spells — Issue 2 — 80%

Advantage, 56 Bath Road, Cheltenham, Glos GL53 7HJ ☎ 0242 224340

A cut-down PD version of the commercial Scetlander game for kids, this is still excellent. Six highly entertaining educational games.

❼ Trees II — Issue 6 — 80%

3 Valley Court Offices, Lower Road, Croydon, Nr Royston ☎ 0767 23302

If you want to keep track of your family history, then this is one of the less painful, and most comprehensive programs for maintaining all that data.

❽ Funnels and Buckets — Issue 2 — 79%

Academy Software, PO Box 65, Herne Bay, Kent CT6 8YZ ☎ 0227 360808

This maths game may look a little primitive but it is very addictive, fast-paced and bound to sharpen up your mental arithmetic. A triumph of substance over style.

❾ Monkey Business — Issue 4 — 77%

Testware, 46 The Avenue, Harrogate, North Yorkshire ☎ 0423 886415

An interactive storybook which features a pair of terrible twins on a trip to the zoo. It may be in mono, but the text, written by an established children's author is great.

❿ Learn To Sign — Issue 5 — 76%

Softcell, 25 Maywood, Drunna, Pontydun CF7 ☎ 0443 238630

If you are learning sign language, then this program is a useful teaching tool which means you don't have to find a partner with whom to practice.

ST

❶ Early Learning Maths — Issue 7 — 94%

Riverdene PDL, 30a School Road, Tilehurst, Reading ☎ 0734 452416

A compilation of 12 excellent maths games for kids from four to seven. Great graphics, great playability. Individually each game would score highly; together they make for a piece of educational software that no ST owner with young kids should be without.

❷ About the House — Issue 3 — 90%

Caledonia PDL, 250 Oldtown Road, Hilton, Inverness IV2 4PT ☎ 0463 225736

Control a butterfly as it flies through a house causing magical things to happen. A genuinely charming game for very young kids.

❸ Dot To Dot — Issue 2 — 90%

Merlin, 11 Grange Close, Minchinhampton, Glos GL3 9DF ☎ 0453 882793

Join-the-dots successfully transferred to computer. The dots in this case can be lettered or numbered for extra educational value and the results can be coloured in.

❹ Moonletters — Issue 1 — 90%

Goodman's PDL, 16 Conrad Close, Meir Hay Estate, Longton, Stoke-on-Trent ST3 1SW ☎ 0782 335650

A spelling program disguised as an alien shoot-'em-up. Excellent graphics and sound.

❺ KidStory — Issue 1 — 90%

Risetime, 19 Quarry Hill Road Tonbridge, Kent

Based on the story of *Little Red Riding Hood* this program enables kids to choose props that will appear in the tale, often with hilarious results.

❻ Colourspace — Issue 1 — 88%

Llamasoft, 49 Mount Pleasant, Tadley, Hants ☎ 0734 814478

This creates coloured patterns in response to you moving your mouse. It may sound dull, but turn the lights down, the music up and it's great fun.

❼ The Undersoft Collection — Issue 7 — 85%

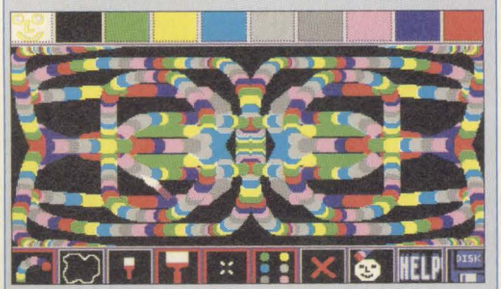
Riverdene PDL, 30a School Road, Tilehurst, Reading ☎ 0734 452416

Strewth, those Aussies know how to put together a decent educational compilation. Maths and spelling for primary school kids presented with fun and style (and loads of insects).

❽ Splash — Issue 5 — 85%

Microchoice, 30 Townhead, Kirkintilloch G66 1NL ☎ 041-777 6300

An art package aimed at the very young which is so packed with easy-to-use features – mirror brushes, colour cycling, flood fill – the kids'll have to drag their parents away.



Packed with unusual features *Splash* is a superb kids' art package

❾ KidShapes — Issue 1 — 85%

Risetime, 19 Quarry Hill Road, Tonbridge, Kent

An art program for young kids this comprises a grid and a number of various coloured shapes that you can plonk on to it. Simple but well-realised.

❿ Betty and Bubby — Issue 5 — 83%

Riverdene, 30a School Road, Tilehurst, Reading, Berkshire ☎ 0734 452416

Betty and Bubby are bookworms whose aim in life is to help youngsters learn about numbers and maths. Three exceptionally well-presented games.

Amiga

❶ Storyland 2 — Issue 3 — 89%

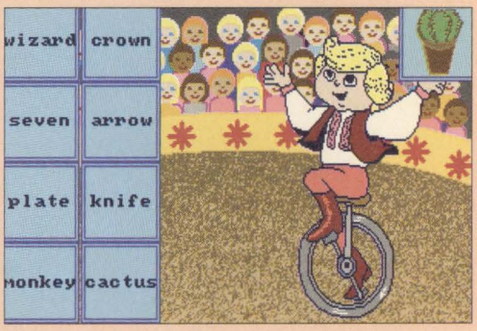
Amiganuts United,169 Dale Valley Road, Hollybrook, Southampton SO1 6QX

An anti-vivisectionist kids' adventure, but don't think it's going to be heavy going. In fact, it's brilliant fun, and constantly coming up with surprises to make you go, "aahh".

❷ Big Top Fun — Issue 5 — 85%

Vally PD, PO Box 15, Peterlee, Co Durham SR8 1NZ ☎ 091 587 1195

Learning about words has never been so much fun. Four superb games all based on a circus theme. Excellent graphics, great sound and lots of fun.



***Big Top Fun*: find the right word to make the cyclist balance**

❸ Play It Safe — Issue 1 — 84%

Déjà Vu, 25 Park Road, Wigan, Lancs, WN6 7AA ☎ 0942 495261

There are hidden dangers lurking around the house, and this game teaches kids to be be on the look out. Great graphics, lots of variety, hours of fun.

❹ Coromandel Voyage — Issue 4 — 83%

GTS, Cucumber Hall Farm, Cucumber Lane, Essendon, Herts ☎ 0707 664654

Based on authentic historical records this program charts the voyage of the ship Coromandel taking settlers from Portsmouth to Sydney. Colourful and informative.

❺ Dizzy Funtime — Issue 2 — 82%

ESP, 32a Southchurch Road, Southend, Essex SS1 2ND

Eight excellent educational games for primary school kids all featuring a cute little blue ball character called Dizzy. The graphics and sound are extremely good.

❻ Lost Treasure — Issue 4 — 82%

Crazy Joe's, 145 Effingham Street, Rotherham, South Yorkshire S65 1BL ☎ 0709 829286

Map reading can be fun as this colourful treasure searching game proves.

❼ Words — Issue 4 — 80%

GTS, Cucumber Hall Farm, Cucumber Lane, Essendon, Herts ☎ 0707 664654

A handy, two-disk compilation of programs all with a lexigraphical theme. Everything from a crossword creator to a word finding utility.

❽ Golf Score Analyser 1.82 — Issue 6 — 79%

NBS, 1 Chain Lane, Newport, Isle of Wight ☎ 0983 529594

Not only can you keep track of your golf scores with this program, you can also work out average scores and print graphs showing the improvement in your performance.

❾ Word Factory — Issue 1 — 78%

Déjà Vu, 25 Park Road, Wigan, Lancs, WN6 7AA ☎ 0942 495261

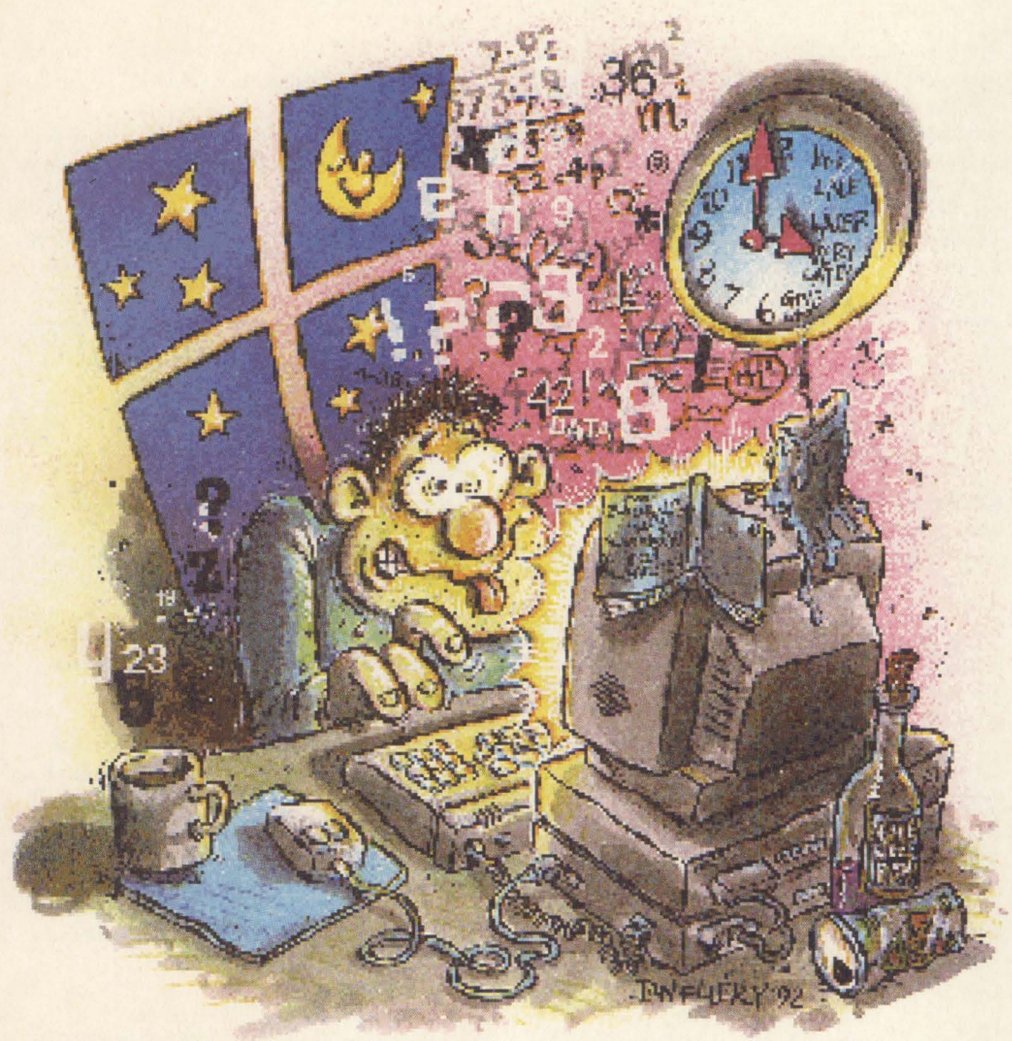
A spelling game for very young children that is set in a factory. A wide selection of words, brilliant graphics and simple to understand gameplay.

❿ Picture Hangman — Issue 6 — 78%

Déjà Vu, 25 Park Road, Wigan, Lancs, WN6 7AA ☎ 0942 495261

Hangman with an extra twist – a picture of the word you are trying to guess appears instead of a man at the gallows, and you can colour the picture in at the end.

Language lessons



Does programming give you nightmares? Do all those commands make about as much sense as a Chinese laundry list? Don't panic! Like any language it's just a matter of learning the basics. Nial Grimes enters a world where pocket translators fear to tread.....

Let's face facts. If you want a program that helps you design customised pigeon lofts or that predicts the likelihood of earthquakes in Gateshead even a letter to Problem Solved is unlikely to meet with much success. But there is a solution, and it's one that many people have turned to, one which, in fact, started off the whole PD scene: program your own! You never know; there might be another Amiga-owning pigeon fancier or fatalistic Gateshead-based ST user who would love to get hold of your program. All you need is a programming language – and the public domain has plenty of them on offer – and a small dose of patience and you too can join the ever increasing ranks of self-taught programmers!

Every piece of software you use is basically a set of instructions which your computer follows, in much the same way as we might follow a tutorial – a step at a time. Obviously, your machine can't read English, though, and so is fed a language it can understand and this is called a programming language. In fact, computers are so dumb that, if you do want to become a programmer, not only do you have to learn a language closer to the computer's own, but you also break down everything you instruct it to do into simple steps. When combined these steps are called an algorithm and can be represented using a 'flow chart'.

You can forget the idea that you need to be some sort of a mathematical genius to program – if you can ride a bicycle then you're more than capable of programming a computer. Once you've learnt the basic principles the sky's the limit.

The language barrier

Programming languages can be broken down into two groups – high- and low-level. High level languages are those which can be understood fairly easily by us mere mortals – they use recognisable words – and are typified by the likes of BASIC and Pascal. While this might sound like the ideal approach, it does have disadvantages. The closer to our own method of thinking a programming language becomes, the further it moves away from the computer's own dialect: machine language. This leaves a problem:

Jargon busters ● Jargon busters ● Jargon busters ● Jargon busters ● Jargon busters

Baffled by binary? Aggravated by assembly? Let's blow the lid off some of this programming jargon...

ASSEMBLY – There's a different assembly language for every different processor chip, but essentially they all work in the same way. As opposed to communicating with the computer on its own level, machine code – which would entail you typing in reams of numbers – the different control codes are replaced by short words or mnemonics

ASSEMBLER – An assembler turns a programmer's mnemonics into machine language, understood by the computer. It can only be used with a program written in an assembly language

COMPILER — Software that translates high-level languages into low-level, executable machine code

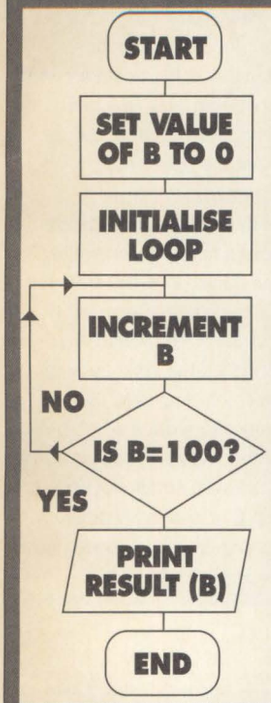
INTERPRETER – This translates high-level languages a line at a time while the program is being run, reporting errors as they occur. The interpreter must be present to run the program

LIBRARIES – A compiler replaces high-level instructions with low-level machine code routines from a 'library'

MNEMONIC – A four-letter (though occasionally it can be more) code referring to a machine language instruction, or 'opcode'

SYNTAX – To draw a human comparison syntax is to programming language as grammar is to spoken languages. Unlike our own language, programming languages cannot handle incorrect grammar. Hence the infamous BASIC 'Syntax Error'

Getting into the flow of things



Half the battle of learning a programming language lies in logical thinking. The task of breaking complex operations down into simple stages is made significantly easier by using a 'flow chart'. The flow chart is made up of several symbols denoting different operations, the important ones being:

- **START** a rounded rectangle
- **INPUT/OUTPUT** a parallelogram
- **PROCESS** a rectangle
- **DECISION** a diamond

While flow charts used to be an essential part of programming, today's languages lend themselves well to good structure without rigorous planning. Nevertheless, flow charts can teach important programming lessons.

◀ A flow chart illustrating the small program used in the body text. A 'print result' box has been added to demonstrate INPUT/OUTPUT

how do you translate the high-level language into a form that the machine can understand?

Computer languages get around this in two ways:

- 'Interpreted' languages; an interpreter translates the program as it runs, one instruction at a time. The interpreter is part of the programming language and so the language needs to be in the computer's memory when the program is being run. The advantage of interpreted languages is that they are friendlier. They are generally easier to understand and simpler to debug; if the program crashes you get a report stating where the error occurred and nature of the problem. The main disadvantage is that they tend to run at a far reduced speed.
- 'Compiled' languages; once the program has been written, a compiler converts the whole thing into machine code before you run it. Compiled languages don't need the compiler in memory when they are being run as all the translation is done beforehand. Their greatest advantage is their speed because the program doesn't need to be continuously converted as it's being run. They are much more difficult to debug though, as you have to recompile them each time you make even the simplest alteration. The reasons behind crashes are more difficult to determine, as there is no system to trap errors once the program has been compiled.

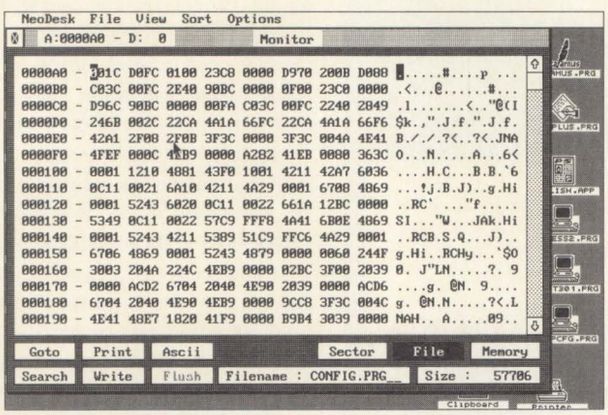
By far the greatest advantage of using a compiled language is speed, though. To illustrate the huge difference let's take a small loop such as in this BASIC program:

```
10 LET B=0
20 FOR A=1 to 100
30 LET B=B+1
40 NEXT A
```

What this program does is give the 'variable' B a value of zero and proceeds to add one to the total 100 times. An interpreter needs to translate each of the instructions in the loop between lines 20-40 everytime it comes across them before executing them. It takes no genius to work out that this leads to a total of 300 translations for 300 simple operations! A compiler would cut out the translation process altogether, increasing speed by anywhere up to ten times!

Downtown

Low-level languages, on the other hand, are far closer related to the machine you are using. Assembly languages are so low level they're practically in the basement and give you the power to program the central processor directly. However, rather than forcing you to memorise the hundreds of numbers on which a computer thrives, each 'opcode' (set of numbers that instruct the computer to do something) is given a four letter name or 'mnemonic'.



Assembly language may be a little on the complicated side, but take a look at the alternative! Not so bad after all is it?

Assemblers come in several varieties – each different processor has to have its own specific assembly language – but all have the following in common: a text editor, an assembler and a linker. Thetext editor is usually included as part of the assembly package but is simply a means to create a correctly-formatted ASCII text file on which the assembler itself will work.

When you have finished writing the program each mnemonic is translated or 'assembled' into its machine code equivalent. Assembly can usually be performed to disk, or to memory for testing purposes.

Most modern assemblers also offer 'macro' abilities which enable the programmer to assign many lines of code to a single call, much like a sub-routine in BASIC. The benefits of this approach are enormous, particularly when it comes to programming with an operating system – all window, graphic and menu functions can be given a command, for instance, saving hours of manual typing.

Still nothing that tickles your fancy? Then maybe you should choose a language that bridges the gap between high- and low-level languages – C is a good example of this. But you needn't feel limited

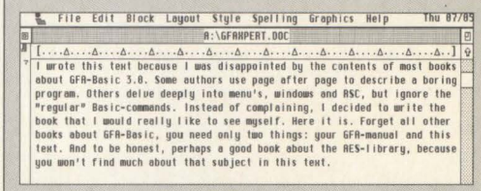
Excuse me, parlez-vous programming?

Like it or not, programming is a tricky business. It takes a decent language, a whole lot of patience and a damned good tutorial to get anywhere, which is where the public domain comes in yet again. Take a browse through any PD catalogue and you will find disk-based tutorials covering just about every language ever written! Let's take a look at some of the more popular disks for ST, Amiga and PC owners:

ST

The ST is supported by a huge amount of tutorials ranging from the ever-popular *GFA BASIC* right through to the more obscure Forth and XLisp languages.

All the following ST disks can be obtained from: Floppyshop, PO Box 273, Aberdeen, AB1 8SJ ☎ 0224 312756


File Edit Block Layout Style Spelling Graphics Help
A:\GFAINPERT.DOC
I wrote this text because I was disappointed by the contents of most books about GFA-Basic 3.0. Some authors use page after page to describe a boring program. Others delve deeply into menu's, windows and RSC, but ignore the "regular" Basic-commands. Instead of complaining, I decided to write the book that I would really like to see myself. Here it is. Forget all other books about GFA-Basic, you need only two things: your GFA-manual and this text. And to be honest, perhaps a good book about the AES-library, because you won't find much about that subject in this text.

***GFA Expert* – one of the many tutorials in the public domain. It contains over 120 pages of top quality *GFA* info**

- **C – Disk nos C01 to C03**
  A complete book on C spread over three disks!
- **GFA BASIC – Disk nos GFA01 to GFA03**
  Well-documented *GFA* source code
- **Forth – Disk no FORTH04**
  Complete tutorial
- **Modula 2 – Disk no MOD01**
  Beginners' guide to Modula 2

Amiga

Amiga help is a little bit thin on the ground, but don't forget, you can always cheat and use *MessySID* to read the PC or ST tutorials!

The following Amiga disks are available from: NBS, 1 Chain Lane, Newport, Isle of Wight, PO30 5QA ☎ 0983 529594

- **C – Disks nos PU86 & PU87**
  The North C package contains a wealth of information for the C programmer
- **Assembly – Disk no F155**
  Destroy those binary blues with a little help from Fred Fish

PC

It's party time as we arrive in PC land again; no lack of choice here. Once again, here's just a small selection of what's available.

All the following disks are available from Softville, Computer Supplies, Unit 5, Stratfield Park, Elettra Avenue, Waterlooville, Hants PO7 7XN ☎ 0705 266509

- Modula 2 – Disk no LPC19 (Two Disks) Comprehensive tutorial with supporting source code
- C – Disk no LPC21 (Two Disks) In depth look at the C language with plenty of examples
- Assembly – Disk no LPC54 A nice tutorial for the good, old-fashioned 8086

Don't forget: one of the best ways to learn any programming languages is by example. Some PD programs are supplied with their source code which you can study at your leisure.

cont. on p94

cont. from p93

Simply speaking: grappling with GFA BASIC

It's time to jump in at the deep end! Your very first programming experience. The subject language is *GFA BASIC*, although the principles, and even the syntax, can be applied to most other versions of BASIC. Bear in mind that if your chosen BASIC is not structured, you'll need to add line numbers at the beginning of each command.

The aim is to produce a program to solve that everyday problem: your times tables! OK, it's not space walk stuff, but you've got to start somewhere. It's a good idea to jot down exactly what you want a program to do; ours is going to work something like this:

1 The program will request which times table we want to view and wait for us to type in the request

2 Print on the screen which table we have chosen and proceed to display it up to a multiple of twelve

3 Wait for a keypress before clearing the screen and returning to ask for the next table

All fairly straightforward stuff, so grab a copy of *GFA* and get ready for a bumpy ride!

```
| Save  |Save,A | Quit  | New   |Blk Sta|Replace| Pg up |Text 16|[
| Load  | Merge | Llist | Block |Blk End| Find  |Pg down|Insert |
INPUT "Which Times Table:",a
```

1 The first step is to get the computer to ask the user which times table they want to see. This is accomplished by using the INPUT instruction. This first line places the message 'Which Times Table?:' on the screen and waits for a response. The number entered is stored in the variable A. Therefore A = the number that you enter (whatever it may be)

```
| Save  |Save,A | Quit  | New   |Blk Sta|Replace| Pg up |Text 16|[
| Load  | Merge | Llist | Block |Blk End| Find  |Pg down|Insert |
INPUT "Which Times Table:",a
CLS
PRINT "Your ";a;" Times Table"
PRINT
```

2 The CLS instruction will make the screen clear after the user has entered a value. The next task is to print the number of the table at the top of the screen. This can be done using PRINT. PRINT can send text, variables or a mixture of both to the screen. In this case we use a mixture of both to make 'Your <variable A> Times Table' appear on the screen

```
| Save  |Save,A | Quit  | New   |Blk Sta|Replace| Pg up |Text 16|[
| Load  | Merge | Llist | Block |Blk End| Find  |Pg down|Insert |
INPUT "Which Times Table:",a
CLS
PRINT "Your ";a;" Times Table"
PRINT
FOR b=1 TO 12
```

3 When used on its own PRINT sends a blank line to the screen – this stops the screen looking cramped. We now move on to the most important part of the program – the loop. What 'B = 1 to 12' is actually telling the computer is: do the next bit 12 times (for 12 calculations) and use variable B as a counter

```
| Save  |Save,A | Quit  | New   |Blk Sta|Replace| Pg up |Text 16|[
| Load  | Merge | Llist | Block |Blk End| Find  |Pg down|Insert |
INPUT "Which Times Table:",a
CLS
PRINT "Your ";a;" Times Table"
PRINT
FOR b=1 TO 12
  c=b*a
```

4 To recap; A contains the number of the table we want and B contains how many times you need to multiply it. A times B is therefore the number we are looking for and we tell the computer that by giving it a new variable 'C = A*B'. NB to avoid confusion BASIC uses an asterisk rather than an 'x' for multiplication

```
| Save  |Save,A | Quit  | New   |Blk Sta|Replace| Pg up |Text 16|[
| Load  | Merge | Llist | Block |Blk End| Find  |Pg down|Insert |
INPUT "Which Times Table:",a
CLS
PRINT "Your ";a;" Times Table"
PRINT
FOR b=1 TO 12
  c=b*a
  PRINT b;" times ";a;"= ";c
NEXT b
```

5 Your ST now knows the answer to the first multiplication, but you need to tell the user by printing it on the screen. This is once again accomplished by using the PRINT instruction. 'NEXT B' simply moves up to the next stage in the loop, ie, one is added to B and the loop continues until 'B = 12' and the whole table has been printed

```
| Save  |Save,A | Quit  | New   |Blk Sta|Replace| Pg up |Text 16|[
| Load  | Merge | Llist | Block |Blk End| Find  |Pg down|Insert |
INPUT "Which Times Table:",a
CLS
PRINT "Your ";a;" Times Table"
PRINT
FOR b=1 TO 12
  c=b*a
  PRINT b;" times ";a;"= ";c
NEXT b
PRINT
PRINT "Press Any Key"
VOID INP(2)
```

6 Next PRINT a blank line and a 'Press Any Key' message. The actual code to wait for a keypress is fairly machine specific – this line may not work in other versions of BASIC. 'INP(2)' returns the next key pressed. You're not actually interested in what it is, as long as it has been pressed. Therefore use the VOID instruction, ie, forget the results

```
| Save  |Save,A | Quit  | New   |Blk Sta|Replace| Pg up |Text 16|Direct | Ru
| Load  | Merge | Llist | Block |Blk End| Find  |Pg down|Insert | Flip  | Te
start:
INPUT "Which Times Table:",a
CLS
PRINT "Your ";a;" Times Table"
PRINT
FOR b=1 TO 12
  c=b*a
  PRINT b;" times ";a;"= ";c
NEXT b
PRINT
PRINT "Press Any Key"
VOID INP(2)
CLS
GOTO start
```

7 You now need to jump back to the beginning of the program so that its asks the user for another table otherwise you will have to quit out of BASIC. Use a label at the beginning called 'start:' and add a 'GOTO start' instruction at the end of the program

```
Your 13 Times Table

 1 times 13= 13
 2 times 13= 26
 3 times 13= 39
 4 times 13= 52
 5 times 13= 65
 6 times 13= 78
 7 times 13= 91
 8 times 13= 104
 9 times 13= 117
 10 times 13= 130
 11 times 13= 143
 12 times 13= 156

 Press Any Key
```

8 Here's the program in action, but don't stop here. With the principles learnt in this short tutorial virtually any maths formula can be automated. A complete list of *GFA* instructions can be found on the disk. Public domain fame awaits!

by any one language. Make the best of all worlds by 'linking' code from the language of your choice.

How low should you go?

Exactly which language you decide on depends entirely on what you want to use it for. Just as certain tools are inappropriate for certain jobs, you need to choose the right programming language for the task in hand. Let's look closely at the three main contenders for lingual supremacy:

- BASIC – although BASIC used to be considered slow and cumbersome, things have now changed. All good BASICs, including the public domain versions reviewed here, are structured, fast and capable of being used for most applications. This very same structured nature also serves as the ideal training ground for prospective assembly language programmers. If there is any one area in which BASIC fails, it has to be speed. Most versions can be fitted with an add-on compiler, but even so cannot hope to compete with a well-written C or assembly program.
- C in any one of its many guises is a good choice

```
 Desk  File  Refinement  Run  Goodies  Folder

Free space:  51886


kaleidoscope
| read a text, clear screen, spread text over the screen
| | start in the middle, there is text left, snip its head off,
| | repeat its head symmetrically
| | | show head in 4 orientations
| | | | show head, rotate left
| | | mirror position
| | choose a new position
| remove cursor
program
```

Many languages are aimed at specific markets. *Elan*, for example, is widely used in Dutch schools as an educational tool

for the applications programmer. The majority of business software released today has been written in C and the code is very portable between machines, unlike assembly language. Add to this the fact that there are literally hundreds, if not thousands, of reference books available covering every aspect of the language and the case for C is pretty conclusive.

- Assembly – at the top of the speed heap we find the assembler. Its power is undoubted, but it leaves a lot to be desired in the user-friendliness stakes. However, no other language offers the control or the flexibility and all programs in which speed and impressive sounds and graphics are essential, such as demos and games, are in assembly territory. Don't let the thought of learning the language put you off; it's not nearly as difficult as most would have you believe. After all you learnt English – one of least logical languages in the world – so assembly should be be no problem!

Poetry in motion

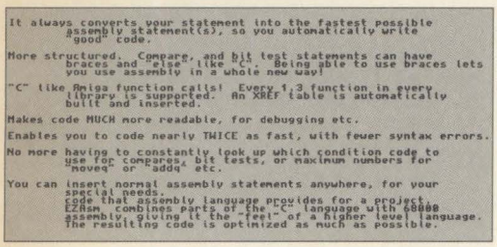
The number of programming languages available in the public domain is truly enormous and the applications limited only by your imagination! While many languages are general purpose, some aim to cover specific needs such as Prolog for artificial intelligence and LOGO or Elan for education. But whatever your needs there's a PD language to suit! The benefits of designing your own software are huge; not only do the niggles of using other people's software disappear – remember if you don't like an aspect of your own software, you can just change it – but there's even the chance of global fame. And who knows, you may even get a review in *Public Domain*!

AMIGA ROUND-UP

The Amiga's mammoth operating system doesn't seem to have put programmers off producing some top quality languages, although the presentation leaves a little to be desired. Maybe a decent shell for *North C* could be your first project?

EZAsm

While C is a pretty powerful product, it just doesn't give you the same level of control over the machine as an assembly language. What we need is a hybrid;


It always converts your statement into the fastest possible assembly statement(s), so you automatically write "good" code.
More structured. Compare, and bit test statements can have braces and "else" like "C". Being able to use braces lets you use assembly in a whole new way!
"C" like Amiga function calls! Every 1.3 function in every library is supported. An XREF table is automatically built and inserted.
Makes code MUCH more readable, for debugging etc.
Enables you to code nearly TWICE as fast, with fewer syntax errors.
No more having to constantly look up which condition code to use for compares, bit tests, or maximum numbers for "moveq" or "addq" etc.
You can insert normal assembly statements anywhere, for your special needs.
code that assembly language provides for a project.
EZAsm combines parts of the "C" language with 68000 assembly, giving it the "feel" of a higher level language.
The resulting code is optimized as much as possible.

Tackle assembly language the easy way, with the help of *EZAsm*, the Amiga solution to C deficiencies

a new language taking the best parts of C and combining them with the flexibility of an assembler. Wow! What an incredible coincidence! Meet *EZAsm*.

This language takes hybrid assembly/C code and turns it into an optimised assembly language source file. As no assembler is supplied you're going to need a PD offering such as *A68K*, which can be found on Fred Fish disk 521 or as part of the *North C* package. All this makes handling the Amiga's operating system a doddle; most functions are reduced to a single command, and all the low level assembly niggles disappear instantly. Several examples of source files are included on disk to give you some idea of how the language works, although most are pretty short.

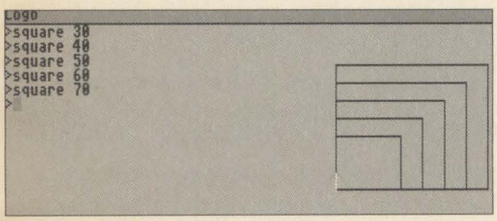
In a way, it's unfortunate that *EZAsm*'s only failing is due to its innovation; the documentation supplied does nothing to explain the power of the language and you are unlikely to find any third party books to provide a tutorial. But having said that, if you have a knowledge of assembler and C and want to make your life that little bit easier, *EZAsm* is thoroughly recommended.

AMIGA 87%

LOGO

LOGO is a one-off language. Its primary application is in schools as a teaching aid, but theoretically could be used to write most simple programs.

The whole system revolves around a 'turtle', or



A turtle, plotting and an educational application. Hey, *Amiga Logo* could make a great new kids' TV series!

arrow, which can be directed around the screen using simple commands: FD for forward, RT for right, LT for left, and so on. This would be a bit limiting if commands could only be entered in real time, which is why *LOGO* allows 'procedures', or a collection of commands, to be entered in one go and called by name. And how do you enter these procedures? By (surprise, surprise) using the editor. Typing 'edit' transports you to this no-nonsense (ie, no features) affair; it could be a lot friendlier.

The main problem with the Amiga version of *LOGO* is that the command window is also used for output. This leads to the ridiculous situation of the text you enter overwriting the drawing! This may be due to the program being based on an Apple 2 version, but is nonetheless inexcusable. Come on, guys, we are living in the 1990's!

LOGO is a great learning tool. This version leaves a little to be desired, but pick up the basics and you will undoubtedly want to move on to something a little bit more powerful anyway. Considering the low registration fee ($5, which works out to around £3) *LOGO* is well worth checking out.

AMIGA 69%

PC ROUND-UP

Serious software is always a PC speciality and languages, unsurprisingly, make a strong showing. The packages reviewed here are just a tiny taster; the PC language scene is nothing if not varied. Prolog, Pascal, XLisp, Fortran, Forth, the list goes on!

Visible Pascal

Pascal was one of the first highly-structured languages to appear and has developed a huge following, particularly among PC owners. It's looking a

Welcome to VISIBLE-PASCAL!
ECHO is off
These programs are on your disk:
Volume in drive A has no label
Volume Serial Number is 363E-14D7
Directory of A:\
INFO BUN COLOR FILEDEMO FIRST1
INDEX REVDEFINE LISTER MATH MODESW
SECOND1 SOUNDS SOUNDS2 STRINGS TESTCASE
WEATHER WORDS
17 file(s) 10487 bytes
324608 bytes free
ECHO is off
ECHO is off
You may do: EDIT file or RUN file
ECHO is off
The user manual is in the files MANUAL.1 & MANUAL.2
ECHO is off
You can print it by typing: PRINTMAN
ECHO is off
Command?

Now you can wave goodbye to those compiler blues because *VPascal* lets you trace a program as it runs!

bit long in the tooth nowadays, but remains an excellent entry into programming. The rules taught by programming in Pascal are invaluable for almost any other language you might care to learn.

Visible Pascal is written with the novice programmer in mind and comes with a hefty (but readable) manual on disk, together with the statutory examples. Although the whole thing is controlled via the command line, it's easy enough to control thanks to helpful on-screen prompts.

The basic concept behind the system is a mixture of compiler and interpreter. Source code can be edited with the supplied editor and then must be compiled to run. Using a standard compiler, this would be the end of the story, but not with *Visible Pascal*; instead, you can still see your code as it runs, giving you an understanding of exactly what's going on in the program. It also makes debugging that little bit easier.

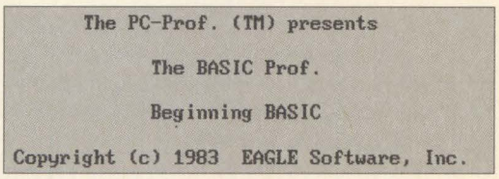
The *Visible* suite is put together nicely. You're probably going to grow out of this particular version of Pascal fairly quickly; but when you do it will have served its purpose in teaching you the language.

PC 80%

P Basic

We couldn't leave the PC without a review of a decent version of BASIC, so here it is: *P Basic*, courtesy of US company Prado software.

The language itself is a *GW BASIC*-compatible affair and as such is slightly limited by the original



Meet the *PBasic Professor* – guaranteed not to answer back, throw chalk at you or give lines for bad behaviour!

specification. However, this does have some advantages in that there are huge amounts of PD disks full of source code available. Add to this the number of reference books and tutorials available for *GW* and it more than compensates for the drawbacks.

Even if a good book is a bit beyond your budget a full tutorial written in the language has been supplied on-disk. *The Professor* (as it is known) is both informative and a good example of what can be achieved with a little bit of effort. Several topics are covered, right from basic concepts through to a listing of all functions and statements together with detailed explanations of their use.

P Basic makes an excellent beginners' language. The fact that it's interpreted is not too much of a problem; because it is shareware you can always include the program itself with any software you write. It's certainly not going to win any awards for originality, but compared to the competition *P Basic* is streets ahead.

PC 79%

SnowCrest BASIC

Networks are handy things – until it comes to getting a programming language to support the damn things that is! This is where *SnowCrest BASIC* fits into the picture; it's a multi-user BASIC for networked PCs. And how does it stand up to its vocation? Read on...

Spread over two disks the language comes with a healthy 125K instruction file plus installation and configuration guides. Installation should be just a case of popping the disk in the drive and typing 'startup', but this is, unfortunately, where the problems begin. *SnowCrest* started its life as a commercial product and as such demands a password on boot-up, which is not made very clear in the manual. After several minutes, I discovered that

cont. on p96

cont. from p95

```
? YES
SOMEWHERE NEARBY IS COLOSSAL CAVE, WHERE OTHERS HAVE FOUND FORTUNES IN
TREASURE AND GOLD, THOUGH IT IS RUMORED THAT SOME WHO ENTER ARE NEVER
SEEN AGAIN.  MAGIC IS SAID TO WORK IN THE CAVE.  I WILL BE YOUR EYES
AND HANDS.  DIRECT ME WITH COMMANDS OF 1 OR 2 WORDS.  I SHOULD WARN
YOU THAT I LOOK AT ONLY THE FIRST FIVE LETTERS OF EACH WORD, SO YOU'LL
HAVE TO ENTER "NORTHEAST" AS "NE" TO DISTINGUISH IT FROM "NORTH".
(SHOULD YOU GET STUCK, TYPE "HELP" FOR SOME GENERAL HINTS.  FOR INFOR-
MATION ON HOW TO END YOUR ADVENTURE, ETC., TYPE "INFO".)
     -  -  -
THIS PROGRAM WAS ORIGINALLY DEVELOPED BY WILLIE CROWTHER.
THE CONVERSION TO BASIC WAS DONE BY SNOWCREST COMPUTER SPECIALTIES.
AROUND YOU IS A FOREST.  A SMALL STREAM FLOWS OUT OF THE BUILDING AND
```

If you can make it this far, you haven't done badly! *SnowCrest BASIC* suffers badly from a commercial past

the correct key sequence for the password was to type in 12345, then press Escape, type 9999, press Return and finally type in START. Logical? I think not.

Password problems aside, you move into the program proper which luckily is fairly good. It is essentially line numbered but powerful with direct access to all DOS functions. Several example programs are contained on the disk, but here you encounter another problem; the program hangs up if you entered the log-on incorrectly.

It's very hard to be objective about a BASIC after spending close to an hour getting the thing to run but *SnowCrest* is a reasonable language. Looking on the bright side, you get the classic *Colossal Adventure* free, which makes it worth a look.

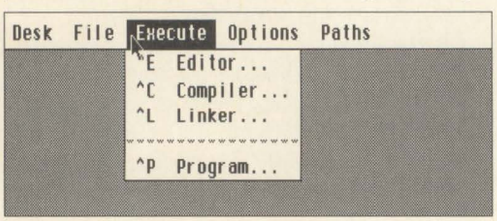
PC **59%**

ST ROUND-UP

The ST has always been considered a programmer's machine, so it's little wonder we find the public domain positively brimming with top quality languages. This situation is helped by at least two of the packages having commercial roots.

Ana Systems' Modula 2

While it never managed to reach the popularity of its predecessor Pascal, Modula 2 has a large following among ST application programmers. With PD greats such as *The Cosh Sequencer* and *ARCShell* under its belt, there's no denying the track record.



Structured and well-put together, *Ana Modula 2* is the ideal introduction to programming if you have an ST

The *Ana Modula 2* system consists of four elements: the editor, the compiler, the linker and rather nifty GEM Shell to string the whole thing together. The editor supplied is the rather elderly *MEmacs* (a sad relic from a time when a programmer's editor had to be at least twice as complicated as the language being used!) but it does do the business and can always be replaced by *ST Writer*, *First Word*, *Word 400* – anything!

With editor firmly out of the way, things take a turn for the better. The compiler and linker are invoked by a single mouse click and when errors appear (and believe me they will!) a report file is created on disk, detailing exactly where the problems lie. This tends to involve a lot of switching between menu and editor, which is hell on floppies.

Libraries are included for all AES, VDI and GEMDOS functions and as such *Ana Modula 2* makes an ideal development tool for serious software. *Modula 2* usually falls foul to competition from C, but considering the public domain C competition – go for *Modula 2*.

ST **85%**

GFA Basic Version 2

Sick of companies releasing crippled bannerware products into the pubic domain? In that case you'll probably find *GFA*'s, 'forget a version 3 demo, let's release version 2 into the public domain' approach a refreshing change. The basic idea (if you'll excuse the pun) is that once you've seen just how good *GFA BASIC* is, you'll want to buy either the compiler for version 2, or upgrade to version 3 – look on it as a shareware registration if you wish.

```
| Save  |Save,A | Quit  | New   |Blk Sta|Replace| Pg up |Text 16|Direct | Run
| Load  | Merge | Llist | Block |Blk End| Find  |Pg down|Insert | Flip  | Test
CLS
WTITLEW #1,"Text Preparation Program"
OPENW 1,640,380
CLS
FILESELECT "B:\",".DOC",filename$
bytes=0
cr=0
ON ERROR GOSUB finish
OPEN "I",#1,filename$
DO
```

Why pay a fortune for a commercial BASIC? *GFA* is fast, friendly and FREE! The public domain comes to the rescue again!

As far as the language is concerned, *GFA* is about the best BASIC you're ever likely to encounter. Not only is it fully-structured but also borrows many ideas from C. Direct calls to the XBIOS, BIOS and GEMDOS make low-level access to the ST a doddle – far simpler than assembly language!

The biggest asset any BASIC can have is speed and *GFA* wins the vote here too. The editor is faster than most word processors and helps rather than hinders development. Up and running, programs have a good turn of speed and can can always be turbo-charged with the £20 compiler.

A huge amount of software has been written using *GFA BASIC*, much of it public domain, and you are unlikely to find a better learners' tool. Combine all this with the wealth of source code available and you have one heck of a package. Don't miss out – it's the bargain of the millennium!

ST **95%**

Adventure Creation Toolkit

Adventure Creation Toolkit (ACT) is an excellent example of a programming language written with a specific purpose in mind. Guessing the application isn't going to stretch your perceptive powers that far, but just how well does it perform?

```
                                    PAM's MultiGEM-window
ADVCOM.TTP
Version 1.81 Copyright(C)1991 by Pascal Merle
advcom.ttp sample
ADVCOM - Copyright (c) 1986, by David Betz
[ including basic.adf ]
[ object: basic-thing ]
[ object: location ]
[ basic-thing: actor ]
[ basic-thing: thing ]
```

***Adventure Creation Toolkit* makes producing top quality adventures a doddle. And don't forget, if you do manage to produce something decent why not send it in for a review!**

For a start, you can forget about wimpy graphics; this is a text-only system. But as all dedicated dungeon masters will tell you, the graphics don't matter, providing the game is up to scratch and ultimately that's your job as the programmer.

Together with ample documentation, a few sample adventures are provided on the disk. One of these is a 'shell', which is an adventure without any locations, objects or characters – you just slot in the plot, places and characters of your choice and you have a ready-made adventure!

Of course, you could always write adventure games in BASIC, C or even assembler (although the last option doesn't even bear thinking about!), but having a language especially written to handle *all* the tricky bits is worth its weight in gold. The major bugbear is still the lack of graphical capabilities, but put that aside and *ACT* is definitely worth a look.

ST **69%**

Where to get those programs

AMIGA

- **EZASM** – PD • 512K • Disk PU003 • NBS, 1 Chain Lane, Newport, Isle of Wight PO30 5QA ☎ 0983 529594
- **NORTH C** – Shareware • Registration fee £15 • 512K • Two drives recommended • Disk PU86 & PU87 • NBS, 1 Chain Lane, Newport, Isle of Wight PO30 5QA ☎ 0983 529594
- **LOGO** – Shareware • Registration fee $5 (£3) • Disk APDC 25 • Softville Computer Supplies,Unit 5, Stratfield Park, Elettra Avenue, Waterlooville, Hants PO7 7XN ☎ 0705 266509

PC

- **VISIBLE PASCAL** – Shareware • Registration fee $35 (£19) • 256K • Disk LPC 6 • Softville Computer Supplies, Stratfield Park, Elettra Avenue, Waterlooville, Hants PO7 7XN ☎ 0705 266509
- **P BASIC** – Shareware • Registration fee $35 (£19) • 128K • Disk LPC 1 • Softville Computer Supplies,Unit 5, Stratfield Park, Elettra Avenue, Waterlooville, Hants PO7 7XN ☎ 0705 266509
- **SNOWCREST BASIC** – Shareware • Registration fee $39.95 (£22) • 128K • Disk LPC 9 (Two disks) • Softville Computer Supplies, Unit 5, Stratfield Park, Elettra Avenue, Waterlooville, Hants PO7 7XN ☎ 0705 266509

ST

- **ANA SYSTEMS' MODULA 2** – Shareware • Registration fee $35 (£19) • 1MB or two drives • Disk Lan 16 & 17 • Floppyshop ST, 45 Provst Graham Avenue, Hazelhead, Aberdeen AB1 8HB ☎ 0224 312756
- **GFA BASIC VERSION 2** – PD • 512K • Riverdene, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN ☎ 0734 452416
- **ADVENTURE CREATION TOOLKIT** – PD • 512K • Disk Lan 25 • Floppyshop ST, 45 Provst Graham Avenue, Hazelhead, Aberdeen AB1 8HB ☎ 0224 312756

In conclusion

Don't be daunted by programming. At first writing your own programs might seem hideously complicated, but it's all a matter of learning a few basics. And not only does the public domain provide a wide variety of low cost languages to suit everybody's tastes, but there are also loads of tutorial and source code disks to help the novice understand how programs are put together.

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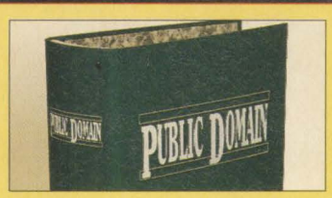

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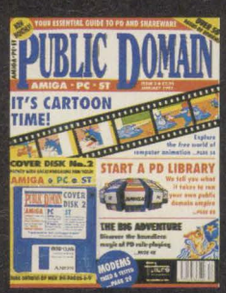

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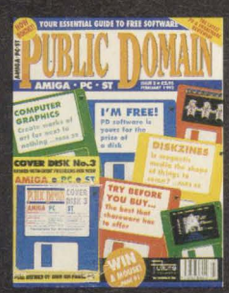

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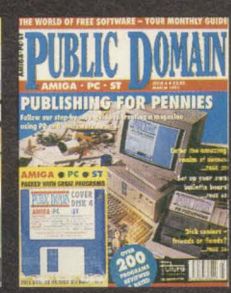

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That's all folks, but fear not, we're already beavering away on the next issue of *Public Domain*.

Compact discs aren't only good for annoying the neighbours with *Abba's Greatest Hits* played too loudly. With the advent of CD ROM technology they can store huge amounts of information that your computer can use too.

We take a look at the discs that have 650 megabytes of PD and shareware stored on them.

Virtually everything you see that has come out of a factory has at some stage been modelled on a computer. Computer Aided Design has replaced the drawing board and we show you the PD and shareware packages that turn your imagination into reality.

Genealogy programs let you trace your heritage. Family trees, personal databases – the public domain has it all on offer. Find out exactly who you are!

Plus all the usual mixture of news, reviews and regular features. Bet you can hardly wait...

Issue 9 of *Public Domain* is on sale from the 2nd July. Have a word with your newsagent!

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Lino & Scanning: Simon Windsor, Simon Chittenden,Chris Stocker,Jerome Clough, Jon Moore

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NEW RELEASE! ALL AT SEA (version 2)

We are pleased to announce the release of ALL AT SEA (version 2) The **full colour** version of our popular interactive story for children age 7 to 10. This is a Terrible Twins adventure in which the child chooses the direction the story takes and also takes part as one of the characters in the story!. Fully illustrated with amusing drawings and attractive screens to hold the child's interest.

Well received by the press and public when the Terrible Twins adventures were released last autumn, we have now added **full colour, sound and an easier user interface.** Needs EGA and a hard disc.

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ALL AT SEA is not available as Shareware. MONKEY BUSINESS II is the Shareware story that is available from Shareware libraries. ALL AT SEA is an entirely different story in which your child takes part in a holiday adventure with Marlene and Marvyn - the Terrible Twins! The story is personalised to feature your child as one of the central characters. We take your child's details from you and send a personalised version within 24 hours.!

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Solder in kit (all versions) £25.00

REPLACEMENTS

The HCS power supply and disk drive upgrades come complete with fitting instructions and plug straight into the ST without soldering. The Power supply produces less heat than the original so is more reliable.

Replacement power supply £39.95
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ACCELERATORS

The AD speed made by ICD fits in place of your microprocessor. It uses a 68000 chip running at a switch able 16Mhz with cache or standard 8Mhz to give virtually 100% compatibility. The 68030 SST for the Mega ST gives phenomenal speed with a 68030 running at 50Mhz! The SST has space for 8Mb on board RAM, TOS2 included.

AD Speed ST £145.00
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The "AdSCSI" ICD host adapter gives SCSI output from the STs DMA port, complete with full documentation, DMA cable and hard drive formatting software. Keyboard interface allows the use of external PC compatible keyboards on the ST. Multirez allows the ST to display all 3 ST resolutions on the multisync monitor. The forget me clock sets your STs time and date, with cartridge-through port.

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14" super high resolution 0.28 dot pitch Multisync monitor is compatible with the TT, PC VGA/SVGA and Multirez. SM144 is compatible with all monochrome ST software, all normal controls at the front. Both have picture size and position adjustment.

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PC emulators fit onto the microprocessor in the ST. The computer can then be switched between PC and ST mode. For fitting on the STE or Mega please contact technician by phone.

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SPECTRE GCR (Inc. 128K Roms).....£300.00
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